

Dated at Bethesda, Maryland, this 23rd day of December, 1980.

Frank J. Miraglia,

Acting Chief, Licensing Branch No. 3, Division of Licensing.

[FR Doc. 81-411 Filed 1-6-81; 8:45 am]

BILLING CODE 7590-01-M

[Docket Nos. 50-250 and 50-251]

Florida Power and Light Co.; Availability of Draft Environmental Statement Related to Steam Generator Repair at Turkey Point Plant, Unit Nos. 3 and 4

Pursuant to the National Environmental Policy Act of 1969 and the United States Nuclear Regulatory Commission's regulations in 10 CFR Part 51, notice is hereby given that a Draft Environmental Statement (NUREG-0743) prepared by the Commission's Office of Nuclear Reactor Regulation related to steam generator repair at Turkey Point Plant, Unit Nos. 3 and 4, located in Dade County, Florida, is being made available for inspection by the public in the Commission's Public Document Room at 1717 H Street, N.W., Washington, D.C. and at the Environmental and Urban Affairs Library, Florida International University, Miami, Florida. The Draft Statement is also being made available at the State Planning and Development Clearinghouse, Office of Intergovernmental Coordinator, Executive Office of the Governor, The Capitol, Tallahassee, Florida, and at the Metropolitan Dade County Planning Department, Suite 900, 909 S.E. First Avenue, Miami, Florida. Requests for copies of the Draft Environmental Statement should be addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Technical Information and Document Control.

Pursuant to 10 CFR Part 51, interested persons may submit comments on the Draft Environmental Statement for the Commission's consideration. Federal and State agencies are being provided with copies of the Draft Environmental Statement (local agencies may obtain these documents upon request). Comments are due by February 23, 1981. Comments by Federal, State, and local officials, or by other persons received by the Commission will be made available for public inspection at the Commission's Public Document Room in Washington, D.C., and the Environmental and Urban Affairs Library, Florida International University, Miami, Florida. Upon consideration of comments submitted with respect to the Draft Environmental

Statement, the Commission's staff will prepare a Final Environmental Statement, the availability of which will be published in the Federal Register.

Comments on the Draft Environmental Statement from interested persons of the public should be addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 18th day of December, 1980.

For the Nuclear Regulatory Commission.

Steven A. Varga,

Chief, Operating Reactors Branch No. 1, Division of Licensing.

[FR Doc. 81-412 Filed 1-6-81; 8:45 am]

BILLING CODE 7590-01-M

International Atomic Energy Agency Draft Safety Guide; Availability for Public Comment

The International Atomic Energy Agency (IAEA) is developing a limited number of internationally acceptable codes of practice and safety guides for nuclear power plants. These codes and guides will be developed in the following five areas: Government Organization, Siting, Design, Operation, and Quality Assurance. The purpose of these codes and guides is to provide IAEA guidance to countries beginning nuclear power programs.

The IAEA Codes of Practice and Safety Guides are developed in the following way. The IAEA receives and collates relevant existing information used by member countries. Using this collation as a starting point, an IAEA Working Group of a few experts then develops a preliminary draft. This preliminary draft is reviewed and modified by the IAEA Technical Review Committee to the extent necessary to develop a draft acceptable to them. This draft Code of Practice or Safety Guide is then sent to the IAEA Senior Advisory Group which reviews and modifies the draft as necessary to reach agreement on the draft and then forwards it to the IAEA Secretariat to obtain comments from the Member States. The Senior Advisory Group then considers the Member State comments, again modifies the draft as necessary to reach agreement and forwards it to the IAEA Director General with a recommendation that it be accepted.

As part of this program, Safety Guide SG-D10, "Fuel Handling and Storage Systems in Nuclear Power Plants," has been developed. The Working Group, consisting of Mr. F. Krainer of the Federal Republic of Germany; Mr. S. Rolandson of Sweden; and Mr. R. I. Facer of the United Kingdom of Great

Britain and Northern Ireland, developed the initial draft of this Safety Guide from an IAEA collation during a meeting on January 8-19, 1979. The Working Group draft was modified by the IAEA Technical Review Committee in a meeting on April 21-25, 1980, and we are soliciting comments on this modified draft. Comments on this draft received by February 6, 1981, will be useful to the U.S. representatives to the Technical Review Committee and Senior Advisory Group in evaluating its adequacy prior to the next IAEA discussion.

Single copies of this draft may be obtained by a written request to the Director, Office of Standards Development, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

(5 U.S.C. 522(a))

Dated at Rockville, Md., this 22nd day of December 1980.

For the Nuclear Regulatory Commission.

Ray G. Smith,

Acting Director, Office of Standards Development.

[FR Doc. 81-415 Filed 1-6-81; 8:45 am]

BILLING CODE 7590-01-M

[Docket No. 50-548-CP]

Omaha Public Power District (Fort Calhoun Station, Unit 2—Application for Construction Permit); Order

December 22, 1980

Upon consideration of Applicant's December 13, 1980, "Request for Withdrawal of Application" and of NRC Staff's response filed on December 3, 1980, it is this 22nd day of December, 1980.

Ordered

That the proceeding before this Licensing Board noticed in the Commission's "Hearing on Application for Construction Permit" published in the Federal Register on February 19, 1976 (41 FR 7595-97) be dismissed.

Dated at Bethesda, Maryland, this 22nd day of December, 1980.

For the Atomic Safety and Licensing Board.

Robert M. Lazo,

Administrative Judge.

[FR Doc. 81-409 Filed 1-6-81; 8:45 am]

BILLING CODE 7590-01-M

Regulatory Guides; Issuance and Availability

The Nuclear Regulatory Commission has issued revisions to two guides in its Regulatory Guide Series. This series has been developed to describe and make available to the public methods acceptable to the NRC staff of

implementing specific parts of the Commission's regulations and, in some cases, to delineate techniques used by the staff in evaluating specific problems or postulated accidents and to provide guidance to applicants concerning certain of the information needed by the staff in its review of applications for permits in licenses.

Regulatory Guide 1.84, Revision 17, "Design and Fabrication Code Case Acceptability—ASME Section III Division 1," and Regulatory Guide 1.85, Revision 17, "Materials Code Case Acceptability—ASME Section III Division 1," list those code cases that are generally acceptable to the NRC staff for implementation in the licensing of light-water-cooled nuclear power plants. These two guides were revised to update the listings of acceptable code cases and to include the results of additional staff review.

Comments and suggestions in connection with (1) items for inclusion in guides currently being developed or (2) improvements in all published guides are encouraged at any time. Comments should be sent to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch.

Regulatory guides are available for inspection at the Commission's Public Document Room, 1717 H Street NW., Washington, D.C. Copies of active guides may be purchased at the current Government Printing Office price. A subscription service for future guides in specific divisions is available through the Government Printing Office. Information on the subscription service and current prices may be obtained by writing to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Publications Sales Manager.

(5 U.S.C. 552(a))

Dated at Rockville, Maryland, this 23rd day of December 1980.

For the Nuclear Regulatory Commission,

Ray G. Smith,

Acting Director, Office of Standards Development.

[FR Doc. 81-416 Filed 1-6-81; 8:45 am]

BILLING CODE 7590-01-M

[Docket Nos. 50-582-CP; 50-583-CP]

San Diego Gas & Electric Co. (Sundest Nuclear Plant, Units 1 and 2—Application for Construction Permits); Order

December 22, 1980.

Upon consideration of Applicant's September 11, 1980, "Motion for Termination of Proceeding" and of NRC

Staff's response filed on October 15, 1980, it is this 22nd day of December, 1980.

Ordered

That the proceeding before this Licensing Board noticed in the Commission's "Hearing on Application for Construction Permits" published in the *Federal Register* on May 9, 1977 (42 FR 23569-71) be *dismissed*.

Dated at Bethesda, Maryland, this 22nd day of December, 1980.

For the Atomic Safety and Licensing Board.

Robert M. Lazo,

Administrative Judge.

[FR Doc. 81-414 Filed 1-6-81; 8:43 am]

BILLING CODE 7590-01-M

[Docket Nos. STN 50-518, STN 50-519, STN 50-520, STN-521]

Tennessee Valley Authority; Issuance of Amendments to Construction Permits

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Amendments No. 4 to Construction Permit Nos. CPPR-150, CPPR-151, CPPR-152, and CPPR-153 issued to the Tennessee Valley Authority for construction of the Hartsville Nuclear Plants, Units A1, A2, B1, and B2, located at the permittee's site in Trousdale and Smith Counties, Tennessee. The amendments reflect deletion of construction monitoring requirements relating to water quality and aquatic biota. The amendments are effective as of the date of issuance.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations. Prior public notice of these amendments is not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments is a ministerial action required as a matter of law and that an environmental impact assessment need not be prepared.

For further details with respect to this action see (1) the application for amendments dated October 31, 1980, (2) Amendment No. 4 to Construction Permit CPPR-150, (3) Amendment No. 4 to Construction Permit CPPR-151, (4) Amendment No. 4 to Construction Permit CPPR-152, and (5) Amendment No. 4 to Construction Permit CPPR-153. All of these items and other related material are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W.,

Washington, D.C., and at the Local Public Document Room located at the Tennessee State Library and Archives, 403 Seventh Avenue, North, Nashville, Tennessee.

A copy of items (2), (3), (4), and (5) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 29th day of December 1980.

For the Nuclear Regulatory Commission,

A. Schwencer,

Chief, Licensing Branch No. 2, Division of Licensing.

[FR Doc. 81-413 Filed 1-6-81; 8:45 am]

BILLING CODE 7590-01-M

SECURITIES AND EXCHANGE COMMISSION

[File No.: 81-643]

PepsiCo Capital Resources, Inc.; Application and Opportunity for Hearing

December 29, 1980.

Notice is hereby given that PepsiCo Capital Resources, Inc. (the "Applicant"), has filed an application pursuant to Section 12(h) of the Securities Exchange Act of 1934, as amended (the "1934 Act"), for exemption from the periodic reporting requirements under Sections 13 and 15(d) of the 1934 Act.

The application states in part:

In the absence of an exemption, Applicant would be required to file periodic reports required by Sections 13 and 15(d) of the 1934 Act.

Applicant believes that the exemptive order it requires is appropriate in view of the fact that it is a wholly-owned subsidiary of PepsiCo, Inc., ("PepsiCo"). The Applicants' sole business purpose is to provide financing for PepsiCo. PepsiCo has and will unconditionally guarantee the payment of the principal and interest of the debt securities issued by Applicant; The debt securities offered by Applicant will be offered based upon the business and financial condition of PepsiCo, which is a reporting company under the 1934 Act.

For a more detailed statement of the information presented all persons are referred to said application which is on file in the Office of the Commission at the Public Reference Room, 1100 L Street, N.W., Washington, D.C. 20549.

Notice is further given that any interested person not later than January 23, 1981, may submit to the Commission in writing his views on any substantial

facts bearing on the application or the desirability of a hearing thereon. Any such communication or request should be addressed: Secretary, Securities and Exchange Commission, 500 North Capitol Street, NW, Washington, D.C. 20549, and should state briefly the nature of the interest of the person submitting such information or requesting the hearing, the reason for such request, and the issues of fact and law raised by the application which he desires to controvert.

Persons who request a hearing or advice as to whether a hearing is ordered will receive any notices and orders issued in this matter, including the date of the hearing (if ordered) and any postponements thereof. At any time after said date, an order granting the application may be issued upon request or upon the commission's own motion.

For the Commission, by the division of Corporation Finance, pursuant to delegated authority.

George A. Fitzsimmons,
Secretary.

[FR Doc. 81-460 Filed 1-6-81; 8:45 am]

BILLING CODE 8010-01-M

DEPARTMENT OF STATE

[CM-8/358]

Oceans and International Environmental and Scientific Affairs Advisory Committee; Partially Closed Meeting

The Antarctic Section of the Oceans and International Environmental and Scientific Affairs Advisory Committee will meet at 2 p.m. on Monday, January 26, 1981 in Room 1207 of the Department of State, Washington, D.C.

At this meeting, officers responsible for Antarctic affairs in the Department of State will discuss key issues and problems involving the Antarctic in the context of current domestic and international developments. This session will be open to the public. The public will be admitted to the session to the limits of seating capacity and will be given the opportunity to participate in discussions according to the instructions of the Chairman. As access to the Department of State is controlled, persons wishing to attend the January 29 meeting should enter the Department through the Diplomatic ("C" Street) Entrance. Department officials will be at the Diplomatic Entrance to escort attendees to Room 1207.

The Antarctic Section of the Oceans and International Environmental and Scientific Affairs Advisory Committee will also meet on Tuesday, January 27, 1981 at the Watergate Office Building,

2600 Virginia Avenue, NW., in sessions which will not be open to the public. These sessions will be devoted to the discussion of classified material under 5 U.S.C. 552b(c)1 and 5 U.S.C. 552b(c)9(B). The disclosure of classified material and revelation of considerations which go into policy development would substantially undermine and frustrate the U.S. position in future negotiations. The purpose of these discussions will be to elicit views concerning the further development of United States policy regarding Antarctic resources, particularly Antarctic mineral resources. This portion of the meeting will include classified briefings and examination and discussion of classified documents pursuant to Executive Order 12065.

Requests for further information on the meetings should be directed to R. Tucker Scully or Robert A. Monks of OES/OPA, Room 5801, Department of State. They may be reached by telephone on (202) 632-3262.

Ann Hollick,

Executive Secretary.

December 15, 1980.

[FR Doc. 81-440 Filed 1-6-81; 8:45 am]

BILLING CODE 4710-01-M

[CM-8/357]

Shipping Coordinating Committee; Subcommittee on Safety of Life at Sea; Meeting

The Working Group on Radiocommunications of the Subcommittee on Safety of Life at Sea will conduct an open meeting on January 15, 1981, Room 8238 at 1:30 p.m. at the Department of Transportation, 400 7th St., SW., Washington, D.C. 20590.

The purpose of the meeting is to prepare position documents for the 23rd Session of the Subcommittee on Radiocommunications of the Intergovernmental Maritime Consultative Organization (IMCO) to be held in London, May 11, 1981. In particular, the working group will discuss the following topics:

- Survival craft radio equipment.
- Operational requirements for future EPIRBs.
- Operational standards for shipboard radio equipment.
- Maritime distress system.

For further information contact Lt. R. F. Carlson, USCG, (G-OTM-3/32), Washington, D.C. 20593. Telephone (202) 426-1345.

Dated: December 9, 1980.

James A. Treichel,

Acting Chairman, Shipping Coordinating Committee.

[FR Doc. 81-422 Filed 1-6-81; 8:45 am]

BILLING CODE 4701-07-M

DEPARTMENT OF THE TREASURY

[Public Debt Series No. 48-80]

Treasury Bonds of 2001

December 23, 1980.

1. Invitation for Tenders

1.1. The Secretary of the Treasury, under the authority of the Second Liberty Bond Act, as amended, invites tenders for approximately \$1,500,000,000 of United States securities, designated Treasury Bonds of 2001 (CUSIP No. 912810 CT 3). The securities will be sold at auction, with bidding on the basis of yield. Payment will be required at the price equivalent of the bid yield of each accepted tender. The interest rate on the securities and the price equivalent of each accepted bid will be determined in the manner described below. Additional amounts of these securities may be issued at the average price to Federal Reserve Banks, as agents for foreign and international monetary authorities.

2. Description of Securities

2.1. The securities will be dated January 12, 1981, and will bear interest from that date, payable on a semiannual basis on August 15, 1981, and each subsequent 6 months on February 15 and August 15, until the principal becomes payable. They will mature February 15, 2001, and will not be subject to call for redemption prior to maturity.

2.2. The income derived from the securities is subject to all taxes imposed under the Internal Revenue Code of 1954. The securities are subject to estate, inheritance, gift, or other excise taxes, whether Federal or State, but are exempt from all taxation now or hereafter imposed on the principal or interest thereof by any State, any possession of the United States, or any local taxing authority.

2.3. The securities will be acceptable to secure deposits of public moneys. They will not be acceptable in payment of taxes.

2.4. Bearer securities with interest coupons attached, and securities registered as to principal and interest, will be issued in denominations of \$1,000, \$5,000, \$10,000, \$100,000, and \$1,000,000. Book-entry securities will be available to eligible bidders in multiples

of those amounts. Interchanges of securities of different denominations and of coupon, registered, and book-entry securities, and the transfer of registered securities will be permitted.

2.5. The Department of the Treasury's general regulations governing United States securities apply to the securities offered in this circular. These general regulations include those currently in effect, as well as those that may be issued at a later date.

3.1 Sale Procedures

3.1. Tenders will be received at Federal Reserve Banks and Branches and at the Bureau of the Public Debt, Washington, D.C. 20226, up to 1:30 p.m., Eastern Standard time, Tuesday, January 6, 1981. Noncompetitive tenders as defined below will be considered timely if postmarked no later than Monday, January 5, 1981.

3.2. Each tender must state the face amount of securities bid for. The minimum bid is \$1,000 and larger bids must be in multiples of that amount. Competitive tenders must also show the yield desired, expressed in terms of an annual yield with two decimals, e.g., 7.11%. Common fractions may not be used. Noncompetitive tenders must show the term "noncompetitive" on the tender form in lieu of a specified yield. No bidder may submit more than one noncompetitive tender and the amount may not exceed \$1,000,000.

3.3. All bidders must certify that they have not made and will not make any agreements for the sale or purchase of any securities of this issue prior to the deadline established in Section 3.1. for receipt of tenders. Those authorized to submit tenders for the account of customers will be required to certify that such tenders are submitted under the same conditions, agreements, and certifications as tenders submitted directly by bidders for their own account.

3.4. Commercial banks, which for this purpose are defined as banks accepting demand deposits, and primary dealers, which for this purpose are defined as dealers who make primary markets in Government securities and report daily to the Federal Reserve Bank of New York their positions in and borrowings on such securities, may submit tenders for account of customers if the names of the customers and the amount for each customer are furnished. Others are only permitted to submit tenders for their own account.

3.5. Tenders will be received without deposit for their own account from commercial banks and other banking institutions; primary dealers, as defined above; Federally-insured savings and

loan associations; States, and their political subdivisions of instrumentalities; public pension and retirement and other public funds; international organizations in which the United States holds membership; foreign central banks and foreign states; Federal Reserve Banks; and Government accounts. Tenders from others must be accompanied by full payment for the amount of securities applied for (in the form of cash, maturing Treasury securities, or readily collectible checks), or by a payment guarantee of 5 percent of the face amount applied for, from a commercial bank or a primary dealer.

3.6. Immediately after the closing hour, tenders will be opened, followed by a public announcement of the amount and yield range of accepted bids. Subject to the reservations expressed in Section 4, noncompetitive tenders will be accepted in full, and then competitive tenders will be accepted, starting with those at the lowest yields, through successively higher yields to the extent required to attain the amount offered. Tenders at the highest accepted yield will be prorated if necessary. After the determination is made as to which tenders are accepted, a coupon rate will be established, on the basis of $\frac{1}{4}$ of one percent increment, which results in an equivalent average accepted price close to 100.000 and a lowest accepted price above the original issue discount limit of 95.000. That rate of interest will be paid on all of the securities. Based on such interest rate, the price on each competitive tender allotted will be determined and each successful competitive bidder will be required to pay the price equivalent to the yield bid. Those submitting noncompetitive tenders will pay the price equivalent to the weighted average yield of accepted competitive tenders. Price calculations will be carried to three decimal places on the basis of price per hundred, e.g., 99.923, and the determinations of the Secretary of the Treasury shall be final. If the amount of noncompetitive tenders received would absorb all or most of the offering, competitive tenders will be accepted in an amount sufficient to provide a fair determination of the yield. Tenders received from Government accounts and Federal Reserve Banks will be accepted at the price equivalent to the weighted average yield of accepted competitive tenders.

3.7. Competitive bidders will be advised of the acceptance or rejection of the tenders. Those submitting noncompetitive tenders will only be notified if the tender is not accepted in full, or when the price is over par.

4. Reservations

4.1. The Secretary of the Treasury expressly reserves the right to accept or reject any or all tenders in whole or in part, to allot more or less than the amount of securities specified in Section 1, and to make different percentage allotments to various classes of applicants when the Secretary considers it in the public interest. The Secretary's action under this Section is final.

5. Payment and Delivery

5.1. Settlement for allotted securities must be made at the Federal Reserve Bank or Branch or at the Bureau of the Public Debt, wherever the tender was submitted. Settlement on securities allotted to institutional investors and to others whose tenders are accompanied by a payment guarantee as provided in Section 3.5., must be made or completed on or before Monday, January 12, 1981. Payment in full must accompany tenders submitted by all other investors. Payment must be in cash; in other funds immediately available to the Treasury; in Treasury bills, notes, or bonds (with all coupons detached) maturing on or before the settlement date but which are not overdue as defined in the general regulations governing United States securities; or by check drawn to the order of the institution to which the tender was submitted, which must be received from institutional investors no later than Friday, January 9, 1981. When payment has been submitted with the tender and the purchase price of allotted securities is over par, settlement for the premium must be completed timely, as specified in the preceding sentence. When payment has been submitted with the tender and the purchase price is under par, the discount will be remitted to the bidder. Payment will not be considered complete where registered securities are requested if the appropriate identifying number as required on tax returns and other documents submitted to the Internal Revenue Service (an individual's social security number or an employer identification number) is not furnished. When payment is made in securities, a cash adjustment will be made to or required of the bidder for any difference between the face amount of securities presented and the amount payable on the securities allotted.

5.2. In every case where full payment has not been completed on time, an amount of up to 5 percent of the face amount of securities allotted, shall, at the discretion of the Secretary of the Treasury, be forfeited to the United States.

5.3. Registered securities tendered in payment for allotted securities are not required to be assigned if the new securities are to be registered in the same names and forms as appear in the registrations or assignments of the securities surrendered. When the new securities are to be registered in names and forms different from those in the inscriptions or assignments of the securities presented, the assignment should be to "The Secretary of the Treasury for (securities offered by this circular) in the name of (name and taxpayer identifying number)." If new securities in coupon form are desired, the assignment should be to "The Secretary of the Treasury for coupon (securities offered by this circular) to be delivered to (name and address)." Specific instructions for the issuance and delivery of the new securities, signed by the owner or authorized representative, must accompany the securities presented. Securities tendered in payment should be surrendered to the Federal Reserve Bank or Branch or to the Bureau of the Public Debt, Washington, D.C. 20226. The securities must be delivered at the expense and risk of the holder.

5.4. If bearer securities are not ready for delivery on the settlement date, purchasers may elect to receive interim certificates. These certificates shall be issued in bearer form and shall be exchangeable for definitive securities of this issue, when such securities are available, at any Federal Reserve Bank or Branch or at the Bureau of the Public Debt, Washington, D.C. 20226. The interim certificates must be returned at the risk and expense of the holder.

5.5. Delivery of securities in registered form will be made after the requested form of registration has been validated, the registered interest account has been established, and the securities have been inscribed.

6. General Provisions

6.1. As fiscal agents of the United States, Federal Reserve Banks are authorized and requested to receive tenders, to make allotments as directed by the Secretary of the Treasury, to issue such notices as may be necessary, to receive payment for and make delivery of securities on full-paid allotments, and to issue interim certificates pending delivery of the definitive securities.

6.2. The Secretary of the Treasury may at any time issue supplemental or amendatory rules and regulations governing the offering. Public

announcement of such changes will be promptly provided.

Paul H. Taylor,

Fiscal Assistant Secretary.

[FR Doc. 81-564 Filed 1-6-81; 8:45 am]

BILLING CODE 4310-10-M

Sunshine Act Meetings

Federal Register

Vol. 46, No. 4

Wednesday, January 7, 1981

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

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1

COMMODITY FUTURES TRADING COMMISSION.

TIME AND DATE: 11 a.m., Friday, January 16, 1981.

PLACE: 2033 K Street NW., Washington, D.C., eighth floor conference room.

STATUS: Closed.

MATTERS TO BE CONSIDERED: Surveillance Briefing.

CONTACT PERSON FOR MORE INFORMATION: Jane Stuckey, 254-6314.

[5-12-81 Filed 1-5-81; 11:42 am]

BILLING CODE 6351-01-M

2

CONSUMER PRODUCT SAFETY COMMISSION.

Commission Meeting

TIME AND DATE: 9:30 a.m., Thursday, January 8, 1981.

LOCATION: Third floor hearing room, 1111 18th Street NW., Washington, D.C.

STATUS: Part open, part closed to the public.

MATTERS TO BE CONSIDERED: Open to the public:

1. Benzene: Regulatory Options

In May, 1978, the Commission proposed a ban of consumer products containing benzene as an intentional ingredient or as a contaminant at a level of 0.1 percent or more. The Commission must publish a final ban or withdraw the proposal by January 15, 1981.

2. Briefing on Garage Door Openers: Emerging Hazard

The staff will brief the Commission on its recommendation that the Commission either commence a proceeding to issue a safety standard for automatic garage door operators, or encourage and

participate in efforts to upgrade the existing UL voluntary standard.

Closed to the public:

3. Commission Representation

The Commission will discuss matters relating to a personnel policy. Closed under exemption 2: internal personnel procedures.

CONTACT PERSON FOR ADDITIONAL INFORMATION: Sheldon D. Butts, Deputy Secretary, Office of the Secretary, Suite 300, 1111 18th Street NW., Washington, D.C. 20207; telephone: (202) 634-7700.

[5-6-81 Filed 1-5-81; 10:06 am]

BILLING CODE 6355-01-M

3

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION.

TIME AND DATE: 9:30 a.m. (eastern time), Friday, December 19, 1980.

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: S-2328-80.

CHANGE IN THE MEETING: The following item, previously announced as being on the open portion of the agenda was moved to the portion closed to the public:

OFCCP, Department of Labor Regulations Pertaining to Executive Order 11246

A majority of the entire membership of the Commission determined by recorded vote that the business of the Commission required this change and that no earlier announcement was possible.

CORRECTION IN PREVIOUS ANNOUNCEMENT:

In favor of change:

Eleanor Holmes Norton, Chair
Daniel E. Leach, Vice Chair
Armando M. Rodriguez, Commissioner.

Abstaining:

J. Clay Smith, Jr., Commissioner

CONTACT PERSON FOR MORE INFORMATION: Treva I. McCall, Acting Executive Officer, Executive Secretariat, at (202) 634-6748.

This Notice Issued December 16, 1980.

[5-14-81 Filed 1-5-81; 3:53 pm]

BILLING CODE 6570-06-M

4

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION.

December 31, 1980.

TIME AND DATE: 9:30 a.m. (eastern time), Friday, January 9, 1981.

PLACE: Commission Conference Room, No. 5240, fifth floor, Columbia Plaza Office Building, 2401 E Street NW., Washington, D.C. 20506.

STATUS: Part will be open to the public and part will be closed to the public.

MATTERS TO BE CONSIDERED:

1. Contract with United Sioux Tribes of South Dakota Development Corp. as a TERO [this is simply a name change].

2. Proposed Procedural Regulations pursuant to the Age Discrimination in Employment Act (29 CFR Part 1626).

3. Proposed Revision of Interpretations of the Equal Pay Act (29 CFR Part 1620).

4. Section 717 Multi-Year Affirmative Action Programs.

5. Section 501 Transition Year Accomplishment Reports.

6. Report on Commission Operations by the Executive Director:

1. Litigation Authorization: General Counsel Recommendations.

Note.—Any matter not discussed or concluded may be carried over to a later meeting.

CONTACT PERSON FOR MORE INFORMATION: Treva I. McCall, Acting Executive Officer, Executive Secretariat, at (202) 634-6748.

This notice issued: December 31, 1980.

[5-15-81 Filed 1-5-81; 3:54 pm]

BILLING CODE 6570-05-M

5

FEDERAL DEPOSIT INSURANCE CORPORATION.

Pursuant to subsection (e)(2) of the "Government in the Sunshine Act" (5 U.S.C. 552b(e)(2)), notice is hereby given that at 5:40 p.m. on Wednesday, December 31, 1980, the Board of Directors of the Federal Deposit Insurance Corporation met in closed session, by telephone conference call, to (1) accept sealed bids for the purchase of certain assets of and the assumption of the liability to pay deposits made in East Gadsden Bank, Gadsden, Alabama, which was closed December 31, 1980; (2) accept the bid for the transaction submitted by Central Bank of Alabama, National Association, Decatur, Alabama; (3) provide such financial assistance, pursuant to section 13(e) of the Federal Deposit Insurance Act (12 U.S.C. 1823(e)), as was necessary to effect the purchase and assumption transaction; and (4) appoint a liquidator for such of the assets of the closed bank as were not purchased by Central Bank of Alabama, National Association.

In calling the meeting, the Board determined, on motion of Chairman Irvine H. Sprague, seconded by Director William M. Isaac (Appointive), concurred in by Mr. H. Joe Selby, acting in the place and stead of Director John G. Heimann (Comptroller of the Currency), that Corporation business required its consideration of the matters on less than seven days' notice to the public; that no earlier notice of the meeting was practicable; that the public interest did not require consideration of the matters in a meeting open to public observation; and that the matters could be considered in a closed meeting pursuant to subsections (c)(8), (c)(9)(A)(ii), and (c)(9)(B) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(8), (c)(9)(A)(ii), and (c)(9)(B)).

Dated: January 2, 1981.

Federal Deposit Insurance Corporation.
Hoyle L. Robinson,
Executive Secretary.

[S-5-81 Filed 1-2-81; 4:44 pm]
BILLING CODE 6714-01-M

6

FEDERAL DEPOSIT INSURANCE CORPORATION.

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that the Federal Deposit Insurance Corporation's Board of Directors will meet in open session at 2:00 p.m. on Monday, January 12, 1981, to consider the following matters:

Disposition of minutes of previous meetings.

Memorandum and Resolution re: Amendments to Part 326 of the Corporation's rules and regulations, entitled "Minimum Security Devices and Procedures for Insured Nonmember Banks," to eliminate the requirement for submission of certain reports on security devices.

Requests by the Comptroller of the Currency for reports on the competitive factors involved in proposed mergers:

The State National Bank of New Iberia, New Iberia, Louisiana, and Sugarland State Bank, Jeanerette, Louisiana.

First National Bank of Holmes County, Lexington, Mississippi, and Merchants & Planters Bank, Tchula, Mississippi.

Reports of committees and officers:

Minutes of the actions approved by the Committee on Liquidations, Loans and Purchases of Assets pursuant to authority delegated by the Board of Directors.

Reports of the Director of the Division of Bank Supervision with respect to applications or requests approved by him and the various Regional Directors pursuant to authority delegated by the Board of Directors.

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550-17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Dated: January 5, 1981.

Federal Deposit Insurance Corporation.
Hoyle L. Robinson,
Executive Secretary.

[S-9-81 Filed 1-5-81; 11:00 am]
BILLING CODE 6714-01-M

7

FEDERAL DEPOSIT INSURANCE CORPORATION.

Pursuant to the provisions of the "Government in the Sunshine Act" (5 U.S.C. 552b), notice is hereby given that at 2:30 p.m. on Monday, January 12, 1981, the Federal Deposit Insurance Corporation's Board of Directors will meet in closed session, by vote of the Board of Directors pursuant to sections 552b (c)(2), (c)(6), (c)(8), and (c)(9)(A)(ii) of Title 5, United States Code, to consider the following matters:

Recommendations with respect to the initiation, termination, or conduct of administrative enforcement proceedings (cease-and-desist proceedings, termination-of-insurance proceedings, suspension or removal proceedings, or assessment of civil money penalties) against certain insured banks or officers, directors, employees, agents, or other persons participating in the conduct of the affairs thereof:

Names of persons and names and locations of banks authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(6), (c)(8), (c)(9)(A)(ii) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(6), (c)(8), (c)(9)(A)(ii)).

Personnel actions regarding appointments, promotions, administrative pay increases, reassignments, retirements, separations, removals, etc.:

Names of employees authorized to be exempt from disclosure pursuant to the provisions of subsections (c)(2) and (c)(6) of the "Government in the Sunshine Act" (5 U.S.C. 552b(c)(2) and (c)(6)).

The meeting will be held in the Board Room on the sixth floor of the FDIC Building located at 550-17th Street, N.W., Washington, D.C.

Requests for information concerning the meeting may be directed to Mr. Hoyle L. Robinson, Executive Secretary of the Corporation, at (202) 389-4425.

Dated: January 5, 1981.

Federal Deposit Insurance Corporation.
Hoyle L. Robinson,
Executive Secretary.

[S-10-81 Filed 1-5-81; 11:06 am]
BILLING CODE 6714-01-M

8

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION.

December 31, 1980.

TIME AND DATE: 10 a.m., Wednesday, January 7, 1981.

PLACE: Room 600, 1730 K Street, NW., Washington, D.C.

STATUS: Open.

MATTERS TO BE CONSIDERED: The Commission will consider and act upon the following:

1. Lone Star Industries, Docket No. VA 80-67-M. (petition for Discretionary Review; issues include interpretation and application of 30 CFR § 56.9-41)

2. Carolina Stalite Company, Docket Nos. BARB 79-319-PM, etc. (Petition for Discretionary Review; issues include whether operation is a mine subject to the 1977 Mine Act, and whether Fourth Amendment warrant provision applies to inspections under the 1977 Mine Act.)

3. United States Steel Corporation, Docket No. HOPE 75-708, IBMA 77-40. (Issues include whether there was a "complete" inspection prior to issuance of an order under section 104(c)(2) of the 1969 Coal Act.)

CONTACT PERSON FOR MORE INFORMATION: Jean Ellen, 202-653-5632.

[S-13-81 Filed 1-5-81; 2:32 pm]
BILLING CODE 6820-12-M

9

FEDERAL RESERVE SYSTEM.

(Board of Governors)

TIME AND DATE: 10 a.m., Monday, January 12, 1981.

PLACE: 20th Street and Constitution Avenue NW., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.

2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board, (202) 452-3204.

Dated: January 2, 1981.

James Macafee,
Assistant Secretary.

[S-6-81 Filed 1-2-81; 5:07 pm]
BILLING CODE 6210-01-M

federal register

Wednesday
January 7, 1981

Part II

Environmental Protection Agency

Iron and Steel Manufacturing Point
Source Category Effluent Limitations
Guidelines, Pretreatment Standards and
New Source Performance Standards

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 420

[WH-FRL 1697-4]

Iron and Steel Manufacturing Point Source Category Effluent Limitations Guidelines, Pretreatment Standards, and New Source Performance Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed regulation.

SUMMARY: EPA proposes a regulation to limit effluent discharges to waters of the United States and the introduction of pollutants into publicly owned treatment works from facilities engaged in manufacturing steel. The Clean Water Act and a consent decree require EPA to issue this regulation.

The purpose of this proposal is to provide effluent limitations for "best practicable technology," "best available technology," "best conventional technology," and to establish new source performance standards and pretreatment standards. After considering comments received in response to this proposal, EPA will promulgate a final rule.

DATES: Comments on this proposal must be submitted on or before March 9, 1981.

ADDRESS: Send comments to: Mr. Ernst P. Hall, Effluent Guidelines Division (WH-552), Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460, ATTENTION: EGD Docket Clerk, PROPOSED IRON AND STEELMAKING RULES (WH-552).

The supporting information and all comments on this proposal will be available for inspection and copying at the EPA Public Information Reference Unit, Room 2922 (EPA Library). The EPA information regulation (40 CFR Part 2) provides that a reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Technical information and copies of technical documents may be obtained from Mr. Ernst P. Hall, at 426-2726 at the address listed above. The economic analysis may be obtained from the Office of Planning and Evaluation (PM 220), Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460.

SUPPLEMENTARY INFORMATION:

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- B. Prior EPA Regulations
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IX. Best Available Technology (BAT) Effluent Limitations

X. New Source Performance Standards (NSPS)

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XIV. Regulated Pollutants

XV. Pollutants and Subcategories Not Regulated

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XXI. Variances and Modifications

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A. Abbreviations, Acronyms, and Terms Used in This Notice

B. Development of Regulated Pollutant List

C. Pollutants Considered for Specific Limitation by Subcategory

I. Legal Authority

The regulation described in this notice is proposed under authority of Sections 301, 304, 306, 307, and 501 of the Clean Water Act (the Federal Water Pollution Control Act Amendments of 1972, 33 USC §§ 1251 *et seq.*, as amended by the Clean Water Act of 1977, P.L. 92-517) (the "Act"). This regulation is also proposed in compliance with the Settlement Agreement in *Natural Resources Defense Council, Inc. v. Train*, 8 ERC 2120 (D.D.C. 1976), modified, 12 ERC 1833 (D.D.C. 1979).

II. Background

The Clean Water Act

The Federal Water Pollution Control Act Amendments of 1972 established a comprehensive program to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 101(a). By July 1, 1977, existing industrial dischargers were required to achieve "effluent limitations requiring the application of the best practicable control technology currently available" ("BPT"), Section 301(b)(1)(A); and by July 1, 1983, these dischargers were required to achieve "effluent

limitations requiring the application of the best available technology economically achievable . . . which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants" ("BAT"), Section 301(b)(2)(A). New industrial direct dischargers were required to comply with Section 306 new source performance standards ("NSPS"), based upon best available demonstrated technology; and new and existing dischargers to publicly owned treatment works ("POTWs") were subject to pretreatment standards under Sections 307 (b) and (c) of the Act. While the requirements for direct dischargers were to be incorporated into National Pollutant Discharge Elimination System (NPDES) permits issued under Section 402 of the Act, pretreatment standards were made enforceable directly against dischargers to POTWs (indirect dischargers).

Although Section 402(a)(1) of the 1972 Act authorized the setting of requirements for direct dischargers on a case-by-case basis, Congress intended that, for the most part, control requirements would be based upon regulations promulgated by the Administrator of EPA. Section 304(b) of the Act required the Administrator to promulgate regulations providing guidelines for effluent limitations setting forth the degree of effluent reduction attainable through the application of BPT and BAT. Moreover, Sections 304(c) and 306 of the Act required promulgation of regulations for NSPS, and Sections 304(f), 307(b), and 307(c) required promulgation of regulations for pretreatment standards. In addition to these regulations for designated industry categories, Section 307(a) of the Act required the Administrator to promulgate effluent standards applicable to all dischargers of toxic pollutants. Finally, Section 501(a) of the Act authorized the Administrator to prescribe any additional regulations "necessary to carry out his functions" under the Act.

The EPA was unable to promulgate many of these regulations by the dates specified in the Act. In 1976, EPA was sued by several environmental groups, and in settlement of this lawsuit, EPA and the plaintiffs executed a "Settlement Agreement," which was approved by the Court. This Agreement required EPA to develop a program and adhere to a schedule to promulgate, for 21 major industries, BAT effluent limitations guidelines, pretreatment standards, and new source performance standards for 65 "priority" pollutants and classes of pollutants. See *Natural*

Resources Defense Council, Inc. v. Train, 8 ERC 2120 (D.D.C. 1976), modified, 12 ERC 1833 (D.D.C. 1979).

On December 27, 1977, the President signed into law the Clean Water Act of 1977. Although this law makes several important changes in the Federal water pollution control program, its most significant feature is the incorporation into the Act of several basic elements of the Settlement Agreement program for toxic pollution control. Sections 301(b)(2)(A) and 301(b)(2)(C) of the Act now require the achievement by July 1, 1984 of effluent limitations requiring application of BAT for "toxic" pollutants, including the 65 "priority" pollutants and classes of pollutants which Congress declared "toxic" under Section 301(b) of the Act. Likewise, the EPA programs for new source performance standards and pretreatment standards are now aimed principally at toxic pollutant controls. Moreover, to strengthen the toxics control program, Congress added Section 304(e) to the Act, authorizing the Administrator to prescribe "best management practices" ("BMPs") to prevent the release of toxic and hazardous pollutants from plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage associated with, or ancillary to, the manufacturing or treatment process.

In keeping with its emphasis on toxic pollutants, the Clean Water Act of 1977 also revises the control program for nontoxic pollutants. Instead of BAT for "conventional" pollutants identified under Section 304(a)(4) (including total suspended solids, biological oxygen demand, oil and grease and, fecal coliform, and pH), the new Section 301(b)(2)(E) requires achievement by July 1, 1984, of "effluent limitations requiring the application of the best conventional pollutant control technology" ("BCT"). The factors considered in assessing BCT for an industry include the costs of attaining a reduction in effluents and the effluent reduction benefits derived compared to the costs and effluent reduction benefits from the discharge of publicly owned treatment works [Section 304(b)(4)(B)]. For nontoxic, nonconventional pollutants, Sections 301(b)(2)(A) and (b)(2)(F) require achievement of BAT effluent limitations within three years after their establishment or July 1, 1984, whichever is later, but not later than July 1, 1987.

The purpose of this proposed regulation is to provide effluent limitations for BPT, BAT, and BCT, and to establish NSPS, pretreatment

standards for existing sources (PSES), and pretreatment standards for new sources (PSNS), under Sections 301, 304, 306, 307, and 501 of the Clean Water Act.

Prior EPA Regulations

On June 28, 1974, EPA promulgated effluent limitations guidelines for BPT and BAT, NSPS, and PSNS for the basic steelmaking operations (Phase I) within the integrated steel industry. 39 FR 24114-24133, 40 CFR Part 420, Subparts A-L, that regulation covered 12 subcategories of the industry: By-Product Cokemaking, Beehive Cokemaking, Sintering, Blast Furnace (Iron), Blast Furnace (Ferromanganese), Basic Oxygen Furnace (Semi-Wet Air Pollution Control Methods), Basic Oxygen Furnace (Wet Air Pollution Control Methods), Open Hearth Furnace, Electric Arc Furnace (Semi-Wet Air Pollution Control Methods), Vacuum Degassing, and Continuous Casting.

In response to several petitions for review, the United States Court of Appeals for the Third Circuit remanded that regulation to the Agency on November 7, 1975. *American Iron and Steel Institute, et al. v. EPA*, 526 F.2d 1027 (3rd Cir. 1975) ("AISI I"). While the Court rejected all technical challenges to the BPT limitations, it held that the BAT effluent limitations and NSPS for certain subcategories were "not demonstrated." In addition, the court questioned all of the regulation on the grounds that EPA had failed to consider adequately the impact of plant age on the cost or feasibility of retrofitting pollution control equipment, to assess the impact of the regulations on water scarcity in arid and semi-arid regions of the country, and to make adequate "net/gross" provisions for pollutants found in intake water supplies.¹

On March 29, 1976, EPA promulgated BPT effluent limitations guidelines and proposed BAT limitations, NSPS and PSNS for steel forming and finishing operations (Phase II) within the iron and steel industry. 39 FR 12990-13030, 40 CFR Part 420, Subparts M-Z. That regulation covered 14 subcategories of the industry: Hot Forming—Primary; Hot Forming—Section; Hot Forming—Flat; Hot Forming—Pipe & Tube; Pickling—Sulfuric Acid—Batch and Continuous; Pickling—Hydrochloric Acid—Batch and Continuous; Cold Rolling; Hot Coatings—Galvanizing; Hot Coatings—

Terne; Miscellaneous Runoffs—Storage Piles, Casting, and Slagging; Combination Acid Pickling—Batch and Continuous; Scale Removal—Kolene and Hydride; Wire Pickling and Coating; and Continuous Alkaline Cleaning.

In response to several petitions for review, the U.S. Court of Appeals for the Third Circuit remanded the regulation to the Agency on September 14, 1977. *American Iron and Steel Institute, et al. v. EPA*, 568 F.2d 284 (3d Cir. 1977). While the court again rejected all technical challenges to the BPT limitations, it again questioned the regulation in regard to the age/retrofit and water scarcity issues. In addition, the court invalidated the regulation as applied to the specialty steel industry for lack of proper notice. Finally, the Court directed EPA to reevaluate its estimates of the cost of compliance with the regulation in light of certain "site-specific" factors and to reexamine its economic impact analysis.²

On June 26, 1978 the Agency promulgated General Pretreatment Regulations applicable to existing and new indirect dischargers within the steel industry and other major industries. 43 FR 27936-2773 (40 CFR Part 403). Those regulations are currently in effect.

Overview of the Industry

The steel industry is included within the United States Department of Commerce, Bureau of the Census Standard Industrial Classification (SIC) Major Group 33—Primary Metal Industries. Those parts of the industry covered by this regulation are the subgroup SIC Nos. 3312, (except coil coatings) 3315, 3316, and 3317. These include all processes, subprocesses, and alternate processes involved in the manufacture of intermediate or finished products in the above categories.

The manufacture of steel involves many processes which require large quantities of raw material and other resources. Steel facilities range from comparatively small plants engaging in one or more production processes to extremely large integrated complexes engaging in several or all production processes. Even the smallest steel facility, however, represents a fairly large industrial complex. Because of the wide variety of products and processes in this industry, operations vary from plant to plant.

The 1978 revenues of the United States steel industry were about 46 billion dollars. The industry ranks third

¹The court also held that the "form" of the regulations was improper, because they did not provide "ranges" of limitations to be selected by permit issuers. This holding, however, was recalled in *American Iron and Steel Institute, et al. v. EPA*, 560 F.2d 589 (3d Cir. 1977).

²The court also held that EPA had no statutory authority to exempt plants in the Mahoning Valley region of Eastern Ohio from compliance with the BPT regulations.

in the nation behind the automotive and petroleum industries in the values of its total shipments; and, with about 500,000 employees, is second only to the automotive industry in the number of employees.

Fifteen steel corporations provided approximately 87% of the total annual U.S. steel ingot production. U.S. steel production represents about 15% of world production.

The steel industry can be segregated into two major components: raw steelmaking; and forming and finishing operations. The Agency estimates that there are about 680 plant locations containing over two thousand individual steelmaking and forming and finishing operations. A listing of these plants is contained in the Appendix B to Volume I of the technical Development Document.

In the first major process, coal is converted to coke which is then combined with iron ore and limestone in a blast furnace to produce iron. The iron is then purified into steel in either open hearth, basic oxygen, or electric arc furnaces. Finally, the steel can be further refined by vacuum degassing.

Following the steelmaking processes are the hot forming (including continuous casting) and cold finishing operations. These operations are so varied that a simple classification and description is difficult. In general, hot forming primary mills reduce steel ingots to slabs or blooms and secondary hot forming mills reduce slabs or blooms to billets, plates, shapes, strip, and various other products. Steel finishing operations involve a number of other processes that do little to alter the dimensions of the hot rolled product, but which impart desirable surface or mechanical properties.

Water is essential to the industry and is used in appreciable quantities in virtually all process operations. An average of 40,000 gallons of water is used in the production of every ton of finished steel, making the industry one of the highest water users of any manufacturing industry.

The following wastewater pollutants have historically been regulated in the steel industry: suspended solids, ammonia-N, fluoride, cyanide, phenols, oil and grease, iron, total and hexavalent chromium, tin, lead, and zinc. The discharge of these pollutants is limited by this regulation. Other pollutants, such as chloride, are found in the industry's wastewaters. However, the Agency is not proposing limitations for those pollutants in this regulation because the technology for their removal is presently considered to be beyond the

scope of best practicable or best available technology for this industry.

In addition to the pollutants known to be present in steel industry wastewaters, many other pollutants became subject to consideration as a result of the NRDC/EPA Settlement Agreement noted earlier. The original list of 65 pollutant classes was defined more specifically by selecting definite compounds within each class to facilitate analytical qualification and quantification and to serve as indicators for other members of the classes. The list of 129 specific toxic pollutants was therefore developed.

III. Scope of This Rulemaking and Summary of Methodology

This proposed regulation expands the water pollution control requirements for the steel industry. In EPA's prior regulations, emphasis was placed on the achievement of best practicable technology (BPT) by July 1, 1977. In general, this technology level represented the average of the best existing performances of well-known technologies for control of familiar (i.e., "classical") pollutants.

In contrast, EPA's efforts are now directed toward insuring the achievement by July 1, 1984, of the best available technology economically achievable, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants. At a minimum, this technology level represents the best economically achievable performance in any industrial category or subcategory. Moreover, as a result of the Clean Water Act of 1977, the emphasis of EPA's program has shifted from "classical" pollutants to the control of toxic substances.

EPA's implementation of the Act required a complex investigation, described in this section and succeeding sections of this notice. EPA and its laboratories and consultants had to develop analytical methods for toxic pollutant detection and measurement, which are discussed under Sampling and analytical Program. EPA then gathered technical and financial data about the industry, which are summarized under Data Gathering Efforts.

EPA studied the steel industry to determine whether differences in raw materials, final products, manufacturing processes, equipment, age and size of plants, water usage, wastewater constituents, or other factors required the development of separate effluent limitations and standards for different segments of the industry. This study

included the identification of raw waste and treated effluent characteristics, including: (1) the sources and volume of water used, the processes employed, and the sources of pollutants and wastewaters in the plant, and (2) the constituents of wastewaters, including toxic pollutants (See Industry Subcategorization for further discussion). EPA identified the pollutants which are being considered for effluent limitations and standards of performance, and statistically analyzed raw waste constituents, as discussed in detail in Section V of the Development Documents for the various subcategories.

EPA identified several distinct control and treatment technologies, including both in-plant and end-of-process technologies, which are in use or are capable of being used in the steel industry. The Agency compiled and analyzed historical data and newly generated effluent quality data resulting from the application of these technologies. The long-term performance, operational limitations, and reliability of each of the treatment and control technologies were also identified. In addition, EPA considered the nonwater quality environmental impacts of these technologies, including impacts on air quality, solid waste generation, water scarcity, and energy requirements.

The Agency estimated the cost of each control and treatment technology by using standard engineering analysis as applied to the applicable wastewater characteristics. EPA derived unit process costs from model plant characteristics (production and flow) applied to each treatment process (i.e., primary coagulation-sedimentation, activated sludge, multi-media filtration). These unit process costs were added to yield the total costs for each treatment level. After confirming the reasonableness of this methodology by comparing EPA cost estimates to actual treatment system costs reported by the industry, the Agency evaluated the economic impacts of these costs. (Costs are reviewed in each subcategory report of the Development Document. Economic impacts are reviewed in the section of this notice entitled Costs, Effluent Reduction Benefits, and Economic Impacts.)

Upon consideration of these factors, as more fully described below, EPA identified various control and treatment technologies including the BPT, BCT, BAT, PSES, PSNS, and-NSPS model treatment systems. The proposed regulation, however, does not require the installation of any particular

technology. Rather, it requires the achievement of effluent limitations representative of the proper operation of these technologies or equivalent technologies.

The proposed effluent limitations for BPT, BCT, BAT, PSES, and PSNS, and NSPS are expressed as mass limitations (lbs/1000 lbs) of product and are calculated by multiplying four figures: (1) effluent concentrations determined from analysis of control technology performance data, (2) wastewater discharge flow for each subcategory, (3) any relevant process or treatment variability factor (e.g., maximum month vs. maximum day), and (4) the appropriate conversion factor. This basic calculation was performed for each regulated pollutant in each subcategory of the industry.

In reevaluating the previously promulgated BPT limitations in light of the Third Circuit's decisions, EPA found that in most instances those limitations are well demonstrated and, in some instances, are less stringent than could be currently justified.

IV. Data Gathering Efforts

Before initiating this study, EPA reviewed the original Development Documents and appendices.⁴ The Agency concluded that additional data were required to respond to the Third Circuit's ruling in *AISI I* and *AISI II* and to develop regulations in accordance with both the Clean Water Act and the *NDRC v Train Settlement Agreement*.

The Agency sent Data Collection Portfolios (DCPs) to all basic steelmaking operations and to approximately 85% of the steel forming and finishing operations in the United States. The DCPs requested information concerning production processes, production capacity and rates, process water usage, wastewater generation rates, wastewater treatment and disposal methods, treatment costs, location, age of production and treatment facilities, as well as general analytical information. The Agency received responses from 393 steelmaking operations and from 1631 steel forming and finishing operations.

The Agency also sent Detailed Data Collection Portfolios (D-DCPs), under the authority of Section 308 of the Act, to 50 steelmaking facilities and 128

forming and finishing facilities. The D-DCPs requested detailed information concerning the cost of installing pollution control equipment including capital, annual and retrofit costs. The D-DCPs also requested long-term analytical data and data regarding specific production operations.

The Agency determined the presence and magnitude of the 129 specific toxic pollutants in steel industry wastewaters in a two-part sampling and analysis program involving 31 steelmaking facilities and 83 forming and finishing facilities.

The Agency obtained data not only from previous studies, questionnaire responses, and sampling visits, but also from NPDES permit files, contacts with pollutant control equipment suppliers, treatability studies, and literature searches. The data gathering program solicited all known sources of data. All available information was used in developing the proposed regulation.

V. Sampling and Analytical Program

The sampling and analysis program for this rulemaking concentrated on the toxic pollutants designated in the Clean Water Act. However, conventional and nonconventional pollutants were also studied. Although it was expected that, except for cokemaking, toxic pollutants in the steel industry would be inorganic rather than organic, the wastewaters from this industry were sampled and analyzed for the presence of toxic organic pollutants. The Agency has not promulgated analytical methods for many of the organic toxic pollutants under Section 304(h) of the Act, although a number of these methods have been proposed (44 FR 69464, December 3, 1979; 44 FR 75028, December 18, 1979). Additional information on the development of sampling and analytical methods for toxic organic pollutants is contained in the preamble to the proposed regulation for the Leather Tanning Point Source Category, 40 CFR Part 425, 44 FR 38749, dated July 2, 1979.

Before analyzing steel industry wastewaters EPA concluded that it had to specify specific toxic pollutants for analysis. The list of 65 pollutants and classes of pollutants potentially includes thousands of specific pollutants; analyses for all of them would overwhelm private and government laboratory resources. In order to make the task more manageable, EPA selected pollutants for study in this and other industry rulemakings. The criteria for choosing these pollutants included the frequency of their occurrence in water, their chemical stability and structure, the amount of the chemical produced,

and the availability of chemical standards for measurement.

EPA checked for the presence and magnitude of the 129 pollutants in steel industry wastewaters in a two-phase sampling and analysis program. The Agency selected plants for sampling which it believed were representative of the manufacturing processes, the prevalent mix of production among plants, and the current treatment technology in the industry. During the first phase of the program EPA sampled ten steelmaking facilities and eleven forming and finishing facilities. During the second phase of the program, EPA sampled 21 steelmaking facilities and 72 forming and finishing facilities.

The primary objective of the field sampling program was to obtain composite samples of wastewater from which to determine the concentrations of toxic pollutants. Sampling visits were made during two to three consecutive days of plant operation, with raw wastewater samples taken either before treatment or after minimal preliminary treatment. Treated effluent samples were taken following application of in-place treatment technologies. EPA also sampled intake water to determine the presence of toxic pollutants prior to contamination by steelmaking processes.

During the first phase of the sampling program the Agency detected and quantified wastewater constituents included on the list of 129 toxic pollutants. Wherever possible, each sample of an individual raw waste stream, a combined waste stream, or a treated effluent was collected by an automatic, time series sample compositor over 2 to 3 consecutive 24 hour sampling periods. Where automatic compositing was not possible, grab samples were taken and composited manually. The purpose of the second phase of the sampling program was to confirm the presence and further quantify the concentrations and waste loadings of the toxic pollutants found during the first phase of the program.

EPA used the analytical techniques described in *Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants*, revised April, 1977. Very similar methods are found among those proposed on December 3, 1979. EPA did not find significant quantities of toxic organic pollutants in most steelmaking wastewaters. The exceptions are cokemaking and cold rolling wastewaters.

Metals analyses for the Phase I operations were by inductively coupled plasma optical emission spectrometry except that the standard flameless

⁴ See EPA 440/1-74-024a: Development Document for Effluent Limitation Guidelines and New Source Performance Standards for the Steelmaking Segment of the Iron and Steel Manufacturing Point Source Category, June, 1974; and EPA 440/1-76/048-d: Development Document for Interim Final Effluent Limitations Guidelines and Proposed New Source Performance Standards for the Forming, Finishing, and Specialty Steel Segments of the Iron and Steel Manufacturing Point Source Category, March, 1976.

atomic adsorption method was used for mercury analyses. Metals analyses for the Phase II operations were by a combination of flame and flameless atomic adsorption methods.

Analyses for cyanide and cyanide amendable to chlorination were also performed using 304(h) methods.

Analysis for asbestos fibers included transmission electron microscopy with selected area defraction; results were reported as chrysotile fiber count.

Analyses for conventional pollutants (BOD5, TSS, pH, and oil and grease) and nonconventional pollutants (total residual chlorine, iron, ammonia, fluoride, and COD) were performed using 304(h) methods.

VI. Industry Subcategorization

In developing this proposed regulation, the Agency determined that different effluent limitations and standards should be developed for distinct segments or subcategories of the steel industry. The Agency's consideration of industry subcategorization included an examination of the same factors and rationale described in its previous studies and the issues raised by the court in *AISI I* and *AISI II*. These factors are:

1. Manufacturing processes and equipment
2. Raw materials
3. Final products
4. Wastewater characteristics
5. Wastewater treatability
6. Size and age of facilities
7. Geographic location
8. Process water usage and discharge rates
9. Costs and economic impacts
10. Non-water quality environmental impacts

Based upon these factors, the Agency has decided to retain the same approach to subcategorization as outlined in previous regulations which is based primarily upon the various manufacturing processes in the steel industry. The Agency found that manufacturing process is the most significant factor and divided the industry into 12 main process subcategories on this basis. Section IV of Volume I of the Development Document contains a detailed discussion of the factors considered and the rationale for selecting the subcategories. The Agency determined that process based subcategorization is warranted in many cases because the wastewaters of the various processes contain different pollutants, requiring treatment by different control systems (e.g., phenol by biological systems in cokemaking and metals by precipitation

in steelmaking). However, in some cases, the wastewaters of different processes were found to contain similar characteristics. In those instances, the Agency determined that subcategorization was appropriate because the process water usage and discharge flow rates varied so widely. A more detailed discussion of this issue is presented in Volume I of the development document.

The subcategories of the steel industry are as follows:

(1) Subpart A—Cokemaking Subcategory

Cokemaking operations involve the production of coke in by-product or beehive ovens. The production of metallurgical coke is an essential part of the steel industry, since coke is one of the basic raw materials necessary for the operation of ironmaking blast furnaces.

(2) Subpart B—Sintering Subcategory

Sintering operations involve the production of an agglomerate which is then used as a raw material in iron and steelmaking processes. This agglomerate (or "sinter") is made up of large quantities of waste particulate matter (fines, mill scale, and flue dust) which have been generated by blast furnaces, open hearth furnaces, basic oxygen furnaces, and recovered from hot forming operations.

(3) Subpart C—Ironmaking Subcategory

Ironmaking operations involve the conversion of iron bearing materials, limestone, and coke into molten iron in a reducing atmosphere in tall cylindrical (blast) furnaces.

(4) Subpart D—Steelmaking Subcategory

Steelmaking operations involve the production of steel in basic oxygen, open hearth, and electric arc furnaces from molten iron and steel scrap materials.

(5) Subpart E—Vacuum Degassing Subcategory

This operation involves the removal of gaseous material (deoxidation) from molten steel by applying a vacuum to the molten steel.

(6) Subpart F—Continuous Casting Subcategory

This operation involves the continuous formation of a primary steel shape (i.e., slab, billet, or bloom) from molten steel by casting the molten steel through a water-cooled mold.

(7) Subpart G—Hot Forming Subcategory

Hot forming is the steel forming process in which hot steel, in solid ingot form, is reduced in size during a series of forming steps into finished and semi-finished steel products.

(8) Subpart H—Scale Removal Subcategory

Scale removal from specialty steels is accomplished by immersing the steel in molten salt baths of kolene or hydride compounds.

(9) Subpart I—Acid Pickling Subcategory

Acid pickling is the process of chemically removing oxides and scale from the surface of steel using dilute inorganic acids.

(10) Subpart J—Cold Forming Subcategory

In cold forming operations, steel products are formed or reduced in thickness or size, or acted upon to produce a smooth surface or to control the mechanical properties of the metal. Rolling solutions are used in cold forming to cool and lubricate the product during the reduction operation.

(11) Subpart K—Alkaline Cleaning Subcategory

This operation involves the removal of rolling oil or other materials from the surface of steel products prior to further processing. The removal can be enhanced by the electrolysis of the steel in an alkaline solution.

(12) Subpart L—Hot Coating Subcategory

In the hot coating process, clean steel products are immersed in baths of various molten metals to deposit a thin layer of the metal on the product surface.

VII. Available Wastewater Control and Treatment Technology

A. Status of In-Place Technology

There are many different treatment technologies currently employed in the steel industry. Generally, primary wastewater treatment systems rely upon physical/chemical methods of treatment, including neutralization, sedimentation, flocculation and filtration. Treatment for toxic pollutants require advanced technologies such as biological treatment, carbon adsorption, ion exchange, reverse osmosis, and more sophisticated chemical techniques.

Within the cokemaking segment of the steel industry, organic pollutant removal is accomplished by biological treatment

in bio-oxidation lagoons and activated sludge plants, and, physical/chemical treatment in ammonia stills, dephenolizers and activated carbon systems. Sedimentation and filtration techniques are employed as well in this subcategory.

Treatment facilities at plants in the sintering, ironmaking and steelmaking subcategories rely heavily upon sedimentation and flocculation techniques. Clarifiers and thickeners are principally used in connection with polymers and coagulants such as lime, alum, and ferric sulfate.

Wastewater from nearly all hot forming operations are treated in scale pits followed by lagoons, clarifiers, filters, or combinations thereof. Polymers and coagulants such as lime, alum, and ferric sulfate are normally used in conjunction with clarifiers. Filters are usually either gravity or pressure types with sand or other media.

Cold finishing treatment techniques include equalization prior to further treatment; neutralization with lime, caustic or acid; flocculation with polymer; and, sedimentation. Central or combined treatment systems are common for these operations.

Another important treatment method commonly practiced in the steel industry is recycle of treated wastewaters. Recycle can be effectively used to significantly reduce wastewater flows and the amount of pollutants discharged to receiving streams. Systems employing high rates of recycle are demonstrated in several subcategories of the steel industry.

B. Advanced Technologies Considered

The Agency considered advanced treatment systems to control the level of toxic and non-conventional pollutants at the BAT, NSPS, PSES, and PSNS levels of treatment. Some of these include in-plant control, however, most include the installation of additional end-of-pipe treatment components.

In-plant control is demonstrated in several subcategories and has been incorporated, where appropriated, into the model BAT, BCT, NSPS, PSES, and PSNS treatment systems. In pickling operations, cascade rinse systems reduce the volume of rinse flow discharged by up to 95%, and are included into the model BAT, BCT, NSPS, PSES and PSNS treatment systems.

The Agency also considered other in-plant control measures such as reducing wastewater generation rates and process modifications. These control measures are highly subcategory specific and are discussed in detail in the respective subcategory reports.

Add-on technology to BPT was considered for the BAT, NSPS, PSES, and PSNS levels of treatment in most of the subcategories. Some of these control measures for the toxic pollutants include two-stage (i.e. extended) biological treatment (cokemaking); granular activated carbon; powdered carbon addition; pressure filtration; pressure filtration accompanied with sulfide addition; and, multi-stage evaporation/condensation systems. Details on these advanced systems are presented in Section VI of volume I of the Development Document.

VIII. Best Practicable Technology (BPT) Effluent Limitations

The factors considered in defining best practicable control technology currently available (BPT) include the total cost of application of technology in relation to the effluent reduction benefits from such application, the age of equipment and facilities involved, the process employed, nonwater quality environmental impacts (including energy requirements) and other factors the Administrator considers appropriate. In general, the BPT technology level represents the average of the best existing performances of plants of various ages, sizes, processes or other common characteristics. Where existing performance is uniformly inadequate, BPT may be transferred from a different subcategory or industry. Limitations based upon transfer technology must be supported by a conclusion that the technology is, indeed, transferable and a reasonable prediction that it will be capable of achieving the prescribed effluent limits. See *Tanners' Council of America v. Train*, 540 F2d 1188 (4th Cir. 1976). BPT focuses on end-of-pipe treatment rather than process changes or internal controls, except where the process changes are common industry practice.

The cost-benefit inquiry for BPT is a limited balancing, committed to EPA's discretion, which does not require the Agency to quantify benefits in monetary terms. See, e.g., *AISI I, supra*. In balancing costs in relation to effluent reduction benefits, EPA considers the volume and nature of existing discharges, the volume and nature of discharges expected after application of BPT, the general environmental effects of the pollutants, and the cost and economic impact of the required pollution control level. The Act does not require or permit consideration of water quality problems attributable to particular point sources or industries, or water quality improvements in particular water bodies. Therefore, EPA has not considered these factors. See

Weyerhaeuser Company v. Costle, 590 F 2d 1011 (D.C. Cir. 1978).

A detailed discussion of the bases for selecting the proposed BPT effluent limitations is set forth in Section IX of each subcategory report of the Development Document. The components of the BPT model treatment systems are presented in Appendix D.

IX. Best Available Technology (BAT) Effluent Limitations

The factors considered in assessing best available technology economically achievable (BAT) include the age of equipment and facilities involved, the process employed, process changes, nonwater quality environmental impacts (including energy requirements) and the costs of application of such technology (Section 304(b)(2)(B)). In general, the BAT technology level represents, at a minimum, the best economically achievable performance of plants of various ages, sizes, processes or other shared characteristics. As with BPT, where existing performance is uniformly inadequate, BAT may be transferred from a different industry or subcategory. BAT may include process changes or internal controls, even when not common industry practice.

The statutory assessment of BAT "considers" costs, but does not require a balancing of costs against effluent reduction benefits (see *Weyerhaeuser v. Costle, supra*). In developing the proposed BAT limitations, however, EPA has given substantial weight to the reasonableness of costs. The Agency has considered the volume and nature of discharges, the volume and nature of discharges expected after application of BAT, the general environmental effects of the pollutants, and the costs and economic impact of the required pollution control levels.

Despite this expanded consideration of costs, the primary determinant of BAT is effluent reduction capability. As a result of the Clean Water Act of 1977, the achievement of BAT has become the principal national means of controlling toxic water pollution. The steel industry discharges over forty different toxic pollutants. EPA considered two to five alternative BAT treatment systems for each subcategory which can reduce the discharge of toxic pollutants by over 90% from BPT levels. A detailed discussion of the bases for selecting the proposed BAT effluent limitations is set forth in Section X of each subcategory report of the Development Document. The components of the BAT model treatment systems are presented in Appendix D.

X. New Source Performance Standards (NSPS)

The basis for new source performance standards (NSPS) under Section 306 of the Act is the best available demonstrated technology. Industry has the opportunity to design the best and most efficient steelmaking processes and wastewater treatment technologies for new plants. Congress therefore directed EPA to consider the best demonstrated process changes, in-plant controls, and end-of-pipe treatment technologies which reduce pollution to the maximum extent feasible. EPA considered two to four alternative treatment systems for each subcategory in selecting proposed NSPS.

A detailed discussion of the bases for selecting the proposed new source performance standards is set forth in Section XII of each subcategory report of the Development Document. The components of the NSPS model treatment systems are presented in Appendix D.

XI. Pretreatment Standards for Existing Sources (PSES)

Section 307(b) of the Act requires EPA to promulgate pretreatment standards for existing sources (PSES), which must be achieved within three years of promulgation. PSES are designed to prevent the discharge of pollutants which pass through, interfere with, or are otherwise incompatible with the operation of Publicly Owned Treatment Works (POTWs). The Clean Water Act of 1977 adds a new dimension by requiring pretreatment for pollutants, such as toxic metals, that pass through POTWs in amounts that would exceed direct discharge effluent limitations or limit POTW sludge management alternatives, including the beneficial use of sludges on agricultural lands. The legislative history of the 1977 Act indicates that pretreatment standards are to be technology-based and analogous to the best available technology for removal of toxic pollutants. The general pretreatment regulations (40 CFR Part 403), which served as the framework for the proposed pretreatment standards for the steel industry, can be found at 43 FR 27736 (June 26, 1978).

EPA has determined that many of the metals present in the steel industry's raw wastewaters pass through POTWs, may limit POTW sludge disposal alternatives and can interfere with biological treatment in the POTW. These metals include: antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc.

Accordingly, EPA is proposing pretreatment standards for metals and other toxic and non-conventional pollutants in this proposed regulation. In addition to the factors discussed above, EPA considered the following factors in developing the proposed pretreatment standards:

1. The manufacturing processes employed by the industry;
2. The age and size of the equipment and facilities involved;
3. The location of manufacturing facilities;
4. Process changes;
5. The engineering aspects of the application of pretreatment technology and its relationship to the POTW;
6. The cost of application of technology in relation to the effluent reduction and other benefits achieved from such application; and,
7. Nonwater quality environmental impact (including energy requirements).

The methodology used to develop the effluent limitations is the same as that used to develop the direct discharger limitations. A detailed discussion of the bases for selecting the proposed pretreatment standards for existing sources is set forth in Section XIII of each subcategory report of the Development Document. The components of the PSES model treatment systems are presented in Appendix D.

XII. Pretreatment Standards for New Sources (PSNS)

Section 307(c) of the Act requires EPA to promulgate pretreatment standards for new sources (PSNS) at the same time that it promulgates NSPS. New indirect dischargers, like new direct dischargers, have the opportunity to incorporate the best available demonstrated technologies including process changes, in-plant controls, and end-of-pipe treatment technologies, and to use plant site selection to ensure adequate treatment system installation. The Agency is proposing PSNS based on the same considerations discussed in Section XI relating PSES.

A detailed discussion of the bases for selecting the proposed pretreatment standards for new sources is set forth in Section XIII of each subcategory report of the Development Document. The components of the PSNS model treatment systems are presented in Appendix D.

XIII. Best Conventional Technology (BCT) Effluent Limitations

The 1977 amendments added Section 301(b)(4)(E) to the Act, establishing "best conventional pollutant control technology" (BCT) for discharges of

conventional pollutants from existing industrial point sources. Conventional pollutants are those defined in Section 304(b)(4)—BOD, TSS, fecal coliform, and pH—and any additional pollutants defined by the Administrator as "conventional." On July 30, 1979, the Agency added oil and grease as a conventional pollutant (44 FR 44501).

BCT is not an additional limitation, but replaces BAT for the control of conventional pollutants. BCT requires that limitations for conventional pollutants be assessed in light of a new "cost-reasonableness" test, which involves a comparison of the cost and level of reduction of conventional pollutants from the discharge of publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources. In its review of BAT for "secondary" industries, the Agency established BCT levels based upon a methodology described at 44 FR 50732 (Aug. 29, 1979). This methodology compares removal costs (dollars per pound of pollutant, measuring from BPT to BCT) with costs for an average POTW. The removal costs of an average POTW has been established by EPA as \$1.34 per pound in July, 1978 dollars.

Where the removal costs of industry are less than the removal costs of an average POTW, the Agency has found the costs to be reasonable and is proposing limitations based upon BCT. In other subcategories where conventional pollutant removal costs exceeded this cost, the Agency is proposing BCT limitations which are equal to the proposed BPT limitations for conventional pollutants. A detailed discussion of the bases for selecting the best conventional technology effluent limitations is set forth in Section XI of each subcategory report of the Development Document. The components of the BCT model treatment systems are presented in Appendix D.

XIV. Regulated Pollutants

The basis for selecting the regulated pollutants, as well as the general nature and environmental effects of these pollutants, is discussed in detail in Section V of Volume I of the Development Document. Some of these pollutants are designated as toxic under Section 307(a) of the Act.

A. BPT—The pollutants controlled by this regulation include, for the most part, the same pollutants controlled by the prior BPT limitations. Some pollutants were deleted for various subcategories (e.g., chromium for hydride scale removal operations) because studies undertaken subsequent to the promulgation of the previous limitations

indicate that these pollutants are not found in great quantities in steel industry wastewaters.

The BPT effluent limitations are expressed in terms of maximum monthly average and maximum daily mass effluent limitations in kilograms of pollutant per 1000 kilograms (lbs/1000 lbs) of product. The limitations are calculated by multiplying the demonstrated pollutant concentrations, the BPT model discharge flow for each subcategory, and an appropriate conversion factor. For maximum daily limitations, the industry average limitation is multiplied by the appropriate variability factor.

B. BCT—The pollutants controlled by the BCT limitations include the statutory conventional pollutants, TSS, pH, and oil and grease. The Agency is not proposing BCT limitations for BOD. It is proposing BCT limitations in all twelve steel industry subcategories. Where the BCT model treatment system failed the BCT cost test, the Agency is proposing BCT limitations which are the same as the proposed BPT limitations.

C. BAT and NSPS—1. **Non-toxic, Non-conventional Pollutants**—The non-toxic, non-conventional pollutants limited by BAT and NSPS include ammonia-N and fluoride. These pollutants are subject to numerical limitations expressed in kilograms per 1000 kilograms (lbs/1000 lbs) of product. Total residual chlorine is also limited in two subcategories where chlorine is used in the treatment process.

2. **Toxic Pollutants**—Forty-eight toxic pollutants were found at concentrations above treatability levels in steel industry wastewaters. (Section V of Volume I contains a list of these pollutants.) Thirty toxic pollutants were found in cokemaking wastewaters. The Agency is proposing effluent limitations in one or more subcategories for the following toxic pollutants: phenols, cyanide, benzene, naphthalene, benzo(a)pyrene, 1,1,1-trichloroethane, 2-nitrophenol, anthracene, tetrachloroethylene, cadmium, chromium, copper, lead, nickel, and zinc. These pollutants are subject to numerical limitations expressed in kilograms per 1000 kilograms (lbs/1000 lbs) of product. The remaining toxic pollutants found in steel industry wastewaters, which are not specifically limited in the proposed regulation, will be controlled by limitations proposed for "indicator" pollutants as discussed below.

3. **Indicator Pollutants**—The difficulty and cost of analyses for the many toxic pollutants found in steel industry wastewaters has prompted EPA to propose an alternative method of

regulating certain toxic pollutants. Instead of proposing specific effluent limitations for each of the forty-eight toxic pollutants found in the industry's wastewaters above treatability levels, the Agency is proposing effluent limitations for certain "indicator" pollutants. These include chromium, lead, zinc, phenols (4AAP) and several of the toxic organic compounds. The data available to EPA show generally that the control of the selected "indicator" pollutants will result in comparable control of other toxic pollutants found in the wastewaters but not specifically limited. By establishing specific limitations on only the "indicator" pollutants, the Agency will reduce the difficulty, high cost, and delays of pollutant monitoring and analyses that would result if pollutant limitations were established for each toxic pollutant. EPA estimates that industry will save about \$10 million annually in monitoring and analysis costs. Section V in Volume I of the Development Document discusses in detail the pollutants found in steel industry wastewaters and those for which the Agency is proposing limitations at the BAT and NSPS levels of treatment. Section X of each subcategory report discusses the bases for the selection of "indicator" pollutants for each subcategory.

D. PSES and PSNS—The Agency is proposing PSES and PSNS for the same toxic pollutants which are limited at BAT and NSPS. The Agency is proposing those standards to insure against POTW upsets, to prevent contamination of POTW sludges and to guard against a pass-through of toxic pollutants. The PSES and PSNS are expressed as maximum monthly average and maximum daily mass limitations in kilograms per 1000 kilograms (lbs/1000 lbs) of product. As a general rule, the Agency establishes pretreatment standards on the basis of concentration. However, for the steel industry, the Agency believes the standards should be based upon mass limitations (kg/kg) to insure that effective toxic pollutant control is provided and to minimize the hydraulic impact of large volume steel industry discharges on POTWs.

XV. Pollutants and Subcategories Not Regulated

The Settlement Agreement contained provisions authorizing the exclusion from regulation, in certain instances, of toxic pollutants and industry subcategories. These provisions have been rewritten in a Revised Settlement Agreement which was approved by the District Court for the District of Columbia on March 9, 1979.

Paragraph 8(a)(iii) of the Revised Settlement Agreement allows the Administrator to exclude from regulation toxic pollutants not detectable by Section 304(h) analytical methods or other state-of-the-art methods. The toxic pollutants not detected and therefore, excluded from regulation are listed in APPENDIX B to this proposed regulation.

Paragraph 8(a)(iii) of the Revised Settlement Agreement allows the Administrator to exclude from regulation toxic pollutants detected in the effluent in only trace quantities and not likely to cause toxic effects. APPENDIX B lists the toxic pollutants in each subcategory which were detected in the effluent in trace amounts (at or below the nominal limit of analytical quantification), which are not likely to cause toxic effects and which are excluded from the proposed regulation.

Paragraph 8(a)(iii) of the Revised Settlement Agreement allows the Administrator to exclude from regulation toxic pollutants detected in the effluent from a small number of sources and uniquely related to those sources. APPENDIX B contains a column labeled "Unique Occurrence" which lists those pollutants detected in the effluents of only one plant and uniquely related to that plant, which have been excluded from the proposed regulation. Appendix C contains the list of pollutants, by subcategory, for which limitations are being proposed.

XVI. Monitoring Recommendations

When required to carry out the objectives of the Act, EPA is authorized by Section 308 to require the owner or operator of a pollutant discharge source to establish and maintain records; make reports; install and use monitoring equipment or methods; sample effluents; and, provide such other information as the Administrator may reasonably require. The authority under Section 308 has been frequently used by permit issuers to set monitoring requirements to "determine whether any person is in violation" of the requirements of a permit or other requirement of the Act [Section 308(a)(2)]. Additionally, EPA has frequently sought information under Section 308 to aid in developing regulations for many industries.

In this and other "toxics" regulations, EPA has developed typical monitoring programs for direct and indirect dischargers for the purpose of estimating monitoring costs as part of the economic impact analysis of the proposed regulation. These monitoring programs are not intended to supercede or duplicate existing compliance monitoring requirements set by NPDES

permit authorities but may be used as a guide in establishing minimum NPDES monitoring requirements. A minimum monitoring and analysis program is feasible at this time because only a small number of toxic pollutants will be limited, the cost of toxic pollutant analyses has decreased, and laboratory availability and efficiency have dramatically increased since the initiation of this study.

The monitoring and analysis program considered by the Agency includes continuous flow monitoring, grab sampling for pH (3 grabs per day, once a week), and oil and grease (3 grabs/day, once a week), and the collection of 24-hour composite samples once per week for all limited pollutants except noted below. More intensive monitoring is suggested for the period of time necessary to determine compliance with the proposed limitations. Accordingly, as of July 1, 1984, (the required compliance date for BCT and BAT), or as of the date of attainment of operational level of treatment facilities if such facilities are completed prior to July 1, 1984, monitoring and analysis of the limited pollutants should be carried out on a schedule of five daily composite samples per week (once per week for GC/MS pollutants). When the appropriate regulatory authority determines that compliance has been demonstrated monitoring can then be undertaken in accordance with the long term schedule discussed above. It should be noted that EPA may, on a case-by-case basis request collection of additional samples of raw wastewater or wastewater at points of intermediate treatment to determine treatment efficiencies.

XVII. Costs, Effluent Reduction Benefits, and Economic Impacts

Executive Order 12044 requires EPA and other agencies to perform Regulatory Analyses of certain regulations, 43 FR 12661 (March 23, 1978). EPA's proposed regulations for implementing Executive Order 12044 require a Regulatory Analysis for major significant regulations involving annualized compliance costs of \$100 million or meeting other specified criteria, 43 FR 29891 (July 11, 1978). Where these criteria are met, the proposed regulations require EPA to prepare a formal Regulatory Analysis, including an economic impact analysis and an evaluation of regulatory alternatives. The proposed regulation for the steel industry meets the criteria for a formal Regulatory Analysis.

The capital and annual costs of this regulation are summarized below.

Cost of Regulation—Steel Industry

(Millions of 1978 dollars)

(Based upon estimated facilities in place 6/30/80)

	Capital costs		
	Facilities in-place	Facilities required	Total
BPT	1,826.0	417.8	2,243.8
BAT (BCT)	188.6	444.1	632.7
NSPS	.0	159.5	159.5
Total	2,014.6	1,021.4	3,036.0

¹ Includes \$49.5 million of committed BAT expenditures.

Annual Costs

	Incremental		Total	
	1984	1990	1984	1990
BPT	96.6	92.7	444.3	420.7
BAT (BCT)	150.3	93.6	193.2	133.8
NSPS	16.7	39.9	16.7	39.9
Total	263.6	226.2	654.2	594.4

EPA estimates that the total additional investment costs for the proposed regulation are about \$1.02 billion. The associated annualized costs (including interest, depreciation, operating and maintenance) will be about \$264 million in 1984, and drop to \$226 million in 1990.

BPT-EPA estimates that, as of July 1, 1980, the steel industry must invest an additional \$418 million to comply with the proposed BPT limitations. EPA estimates that the industry will incur annualized costs (including interest, depreciation, operating and maintenance) of \$96.6 million of 1984. These costs decrease to \$92.7 million by 1990.

BAT-EPA estimates that the steel industry must invest an additional \$444.1 million to comply with the proposed BAT limitations. The incremental annual costs necessary to achieve the proposed BAT limitations are about \$150.3 million in 1984. These costs decrease to \$93.6 million in 1990. The costs to comply with the proposed BAT limitations includes the cost to comply with the proposed BCT limitations as the BAT model technology includes the BCT model technology in nearly every instance.

Compliance with the proposed BAT and BCT limitations will result in the removal of about 1,900 tons per year of toxic organic pollutants, 2,500 tons per year of toxic metals and 130,000 tons per year of other pollutants. As discussed in detail each subcategory report of the Development Document, the Agency has concluded that the effluent reduction benefits associated the industry's compliance with the proposed limitations and standards justify the costs. The Agency, between proposal

and promulgation, will continue to evaluate alternative BAT levels that are either more or less stringent than those proposed herein.

EPA's economic impact assessment is set forth in *Economic Impact Analysis of Proposed Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards for the Iron and Steel Manufacturing Point Source Category*.

This report, focuses on the production, pollution control, and financial characteristics of the steel industry. In analyzing these industry characteristics, the Agency employed a policy testing model of the steel industry which combines a methodology for calculating economic effects with the cost impact methodology employed by the American Iron and Steel Institute (AISI) in its investigation of pollution control costs for the industry. This combination permits and integrated analysis of the costs and financial effects of environmental regulations.

The Agency assessed the economic impact of this regulation under three scenarios. The first scenario was based on a continuation, over the 1981-90 period, of the economic environment and government economic policy the steel industry faced over the past decade. The second scenario was based on an average 3.0 percent growth in steel shipments, higher profitability, and changes in government policy that included more rapid recovery of capital investments, a return to "fair value" steel import prices in the domestic market, and the latitude for the steel industry to increase prices constrained only by supply and demand forces. The third scenario was designed to reflect changes in the economic environment due to government economic policies that would affect the steel industry's performance throughout the 1980s. The third scenario examines the impact of this regulation by evaluating the effect of common elements of the economic recovery policies various groups within government are currently considering. Specific changes include an increase in real economic growth due to tax incentives, a reinstatement of trigger prices, and approximately a 40 percent increase in depreciation cash flows. Continuation of past policies include, until at least the mid-1980s, a 10.1 percent limit on nominal steel price increases set by the current "Anti-Inflation" program. The results of these three analyses are summarized in Tables 1 and 2.

Table 1.—Short-Run Economic Impact of Proposed Water Pollution Control Regulations, 1984

	Domestic shipments [millions of net tons]	Employment [thousands of employees]	Market share [percent]
Industry Status in 1979	100.3	342.0	84.8
Scenario 1:			
Baseline	101.3	334.5	82.0
Additional Water Pollution Control Costs:			
Zero Pass-Through	101.3	335.8	82.0
Full Pass-Through	101.3	335.8	82.0
Scenario 2:			
Baseline	106.7	356.0	82.0
Additional Water Pollution Control Costs	106.7	357.3	82.0
Scenario 3:			
Baseline	106.6	354.8	85.0
Additional Water Pollution Control Costs	106.6	356.1	85.0

¹Reflects the new surge provisions of the recently re-instituted Trigger Price Mechanism.

Table 2.—Long-run Economic Impact of Proposed Water Pollution Control Regulations, 1990

	Domestic shipments [millions of net tons]	Employment [thousands of employees]	Market share [percent]
Industry Status in 1979	100.3	342.0	84.8
Scenario 1:			
Baseline	92.4	271.1	71.5
Additional Water Pollution Control Costs:			
Zero Pass-Through	86.1	254.6	66.6
Full Pass-Through	89.1	262.9	68.9
Scenario 2:			
Baseline	126.0	366.4	82.0
Additional Water Pollution Control costs	126.0	368.3	82.0
Scenario 3:			
Baseline	117.8	341.5	85.0
Additional Water Pollution Control Costs	115.3	336.0	83.2

¹Represents a recovery from a baseline market share of 77.8 percent in 1986 and from a market share after additional water pollution control costs of 73.4 percent also in 1986.

First Scenario

In the first scenario, the effects of two cost pass-through assumptions were examined—zero pass-through of annual costs and full pass-through of annual costs. The analysis indicated that in either case the industry will be unable to finance the capital necessary to maintain existing production facilities, while at the same time maintaining bond ratings high enough to ensure ready access to debt capital markets. The capital requirements of this regulation will further reduce capital to maintain existing facilities. Because of the poor profit projections, the Agency does not think the industry can issue common stock without diluting stockholders' equity. Therefore, the industry will have

to rely on debt as the principal source of funds for financing its investments.

Market Share—Zero Pass-Through of Annual Costs

Large debt issues could push debt to capitalization ratios to levels incompatible with bond ratings necessary to ensure ready access to debt funds and interest coverage ratios necessary to avoid undue risk of failure to meet financial obligations. Consequently, the Agency expects the industry to forego some reworks expenditures. In this event, the Agency predicts that the steel industry's share of the domestic market for steel will decline by about 2.2 percent (to 69.3 percent) below the estimated 1990 baseline share (71.5 percent) after complying with the BPT limitations, and by an additional 2.7 percent (to 66.6 percent) after complying with BAT limitations, or a combined loss of 4.9 percentage points.

The industry will face excess capacity as it attempts to recover from the current recession and will face continued competition from foreign steel. Throughout the 1980s, both factors will prevent the industry from raising prices to levels that would enable them to recover the annual cost of this regulation.

Market Share—Full Pass-Through of Annual Costs

Although unlikely, if full pass-through of costs were assumed, the market share would only fall to 70.5 percent after compliance with the BPT limitations and to 68.9 percent after compliance with the BAT limitations, or a combined incremental loss of 2.6 percentage points.

Employment—Zero Pass-Through of Annual Costs

Assuming zero pass-through of annual costs, the decline in production capacity due to this regulation on the steel industry is expected to cause a loss of about 17,900 jobs below a projected baseline employment of 271,100, or about 6.6 percent of baseline employment. However, additional expenditures for water pollution control will increase industry employment by about 1,400. Thus, under the first scenario, the net effect of this proposed regulation will be a decline of about 16,500 jobs from the projected baseline employment, or 6.1 percent of baseline.

Employment—Full Pass-Through of Annual Costs

Assuming that all costs are passed through, capacity reductions would decrease steel industry employment by

about 9,600 jobs from a projected baseline employment of 271,100. With additional jobs of 1,400, the net decline would be 8,200, or 3.0 percent of the baseline.

Second Scenario

Based on the analysis of these regulations under the second scenario, the long-run (1985-90) adverse impact of this regulation will be greatly reduced. The industry should be able to finance a full reworks program as well as all pollution control requirements during the 1981-90 period without a loss in current market share.

The analysis of this scenario indicates that the industry will face some financial strain during the 1981-84 period similar to that under the first scenario. It is during this period that the industry will have to make all the capital expenditures necessary to comply with the BPT and BAT regulations. These requirements will necessitate significant increases in debt financing because profitability will not begin to increase to levels that would permit additional common stock issues until about 1986. Thus, during the 1981-84 period, if industry attempts to prevent a deterioration in its bond ratings and tries to ensure ready access to capital markets, some reworks expenditures will be foregone.

Market Share

In contrast to the first scenario, this reduced capital expenditure program will be sporadic, spread over the entire industry, and not sustained. By 1984, profitability will begin to increase significantly, and by 1986 the industry should be able to begin issuing additional common stock. Thus, in the later part of the decade, the industry should be able to maintain its debt to capitalization and interest coverage ratios at levels that would ensure ready access to debt markets and avoid undue risks of default while at the same time financing all its capital requirements. Moreover, the industry can probably more than make up the reworks foregone in the first half of the decade thereby forestalling any loss in market share.

Employment

Under the second scenario, the effects of the regulation on employment should be positive. With no long-run reductions in productive capacity, there should be no decline in employment. However, additional expenditures on water pollution control equipment should increase employment by about 1,915 workers above a baseline employment of 336,400. Some minor reductions in

employment would occur due to a slightly reduced shipments volume resulting from price increases to cover water pollution control costs.

Third Scenario

The economic analysis under the third scenario reveals an overall impact that varies, depending on the time period, between the first and the second scenarios. The financial conditions of the steel industry depicted in the first scenario will persist until about 1987 or 1988, and then the industry will move towards the conditions depicted in the second scenario during the late 1980s and early 1990s.

Market Share

During the 1981-86 period, the industry will be under severe financial strain. Therefore, to meet the capital requirements of this regulation and to maintain ready access to capital markets, the industry will again forego reworks of existing facilities. Consequently, by 1988 the industry's share of the domestic steel market is expected to decline from a baseline level of 77.8 percent to 73.4 percent, or 4.4 percentage points, as a result of this proposed regulation. However, by 1986, profitability should begin to increase significantly to levels that will enable the industry to reinstate a reworks program in addition to significant capacity replacement and expansion. Thus, by 1990, the industry's improved economic conditions will increase this market share to 83.2 percent compared to a baseline level of 85.0 percent.

Employment

The maximum impact of additional water requirements on employment would occur in 1987 and 1988. In these years, additional water pollution control requirements would lead to a decline in production labor of 16,190 jobs below the projected baseline. The decrease would be partially offset by the 1,650 jobs needed to operate the additional water pollution control equipment. Thus, the net effect of this water pollution control regulation on steel industry employment would be a temporary reduction of 14,540 jobs below the projected baseline employment by the late 1980s. After 1988, employment should begin to rebound. By 1990, employment will be reduced by 5,500 workers below a baseline of 341,500. However, some minor reductions in employment would also occur as a result of slight reductions in steel shipments due to price increases necessary to recover the water pollution control costs.

Conclusions

Based on the findings under these three scenarios, the industry's ability to finance required production capital over the 1981-90 period while complying with this regulation will depend on changes in broad government economic policies toward the industry. Policy changes could provide the industry with additional cash flows and could increase the demand for steel and steel industry profits as industry in general increases its expenditures on steel intensive capital equipment. In the presence of such changes, the steel industry's financial performance could begin to approach that described in the second scenario by the late 1980s or early 1990s. In the absence of such changes, the industry's performance throughout the 1980s could be best described by the first scenario. The Agency, in anticipation of some change in government policy towards industry, believes the assumptions embodied in the third scenario could well reflect the actual environment in which the steel industry will be operating in the 1980s. However, the Agency requests public comments on which of these three scenarios is the most appropriate for assessing the economic impact of this proposed regulation.

XVIII. Non-Water Quality Aspects of Pollution Control

The elimination or reduction of one form of pollution may aggravate other environmental problems. Sections 304(b) and 306 of the Act require EPA to consider the non-water quality environmental impacts (including energy requirements) of certain regulations. In compliance with these provisions, EPA considered the effect of this regulation on air pollution, solid waste generation, water consumption, and energy consumption. This proposed regulation was circulated to and reviewed by EPA personnel responsible for nonwater quality programs. While it is difficult to balance pollution problems against each other and against energy use, EPA is proposing a regulation which it believes best serves often competing national goals.

A detailed discussion of these impacts is contained in Section VIII of each subcategory report of the Development Document. Following is a summary of the non-water quality environmental impacts (including energy requirements) associated with the proposed regulation:

A. Air Pollution—Industry compliance with the proposed BPT, BAT, BCT, NSPS, PSES, and PSNS limitations and standards will not create any substantial air pollution problems.

However, in several subcategories, slight air impacts can be expected. First, minimal amounts of volatile organic compounds may be released to the atmosphere by aeration of cokemaking wastewaters in biological treatment. Second, small emissions of air pollution may result when ironmaking wastewaters are used to quench the hot slag generated in the process. Third, water vapor containing some particulate matter will be released from the cooling tower systems used in several of the subcategories. The Agency does not consider any of these impacts to be significant.

B. Solid Waste—The Agency has determined that 37.3 million tons per year of solid waste (at 30% solids) have and will be generated by the steel industry in complying with the proposed regulation. Of this amount, almost all (37.0 million tons) is already generating by the steel industry in complying with the proposed BPT limitations. This solid waste is comprised almost entirely of treatment plant sludges. EPA recognizes that significant quantities of other solid wastes, such as electric furnace dust and blast furnace slag, are generated by the steel industry. However, those solid wastes are generated by the manufacturing processes and are not associated with this proposed water pollution control regulation. For this reason, process solid wastes are not included in this impact analysis.

The data gathered for this study demonstrate that the industry collects and disposes of most sludges currently generated in existing treatment systems. Hence, the industry is presently incurring sludge disposal costs and finding the necessary disposal sites. The Agency believes that the industry will continue to be able to do so. (EPA is unable to estimate accurately the number of disposal sites that are secure, well maintained operations). The average sludge disposal cost used in this analysis is \$5.00 per ton. These costs have been included in the Agency's estimate for costs of compliance with the proposed regulation and the Agency expects the solid waste impacts associated with the proposed regulation to be small.

C. Consumptive Water Loss—Water loss is a remand issue of the 1974 and 1976 regulations. As discussed in detail in Section III of the development document, the Agency concludes that the benefits derived from compliance with the limitations justify the negative impacts associated with the consumption of water. The Agency has reached this conclusion after considering this issue on both an

industry-wide basis and on a water-scarce regional basis.

D. Energy Requirements—EPA estimates that compliance with the proposed regulation will result in a net increase of electrical energy consumption at the BPT and BAT/BCT levels of treatment as shown below:

Treatment level	Net energy consumption (kw-hr) (billion)
BPT	1.20
BAT/BCT	0.87
Total	2.07

The electric power requirements associated with the proposed BPT, BCT, and BAT limitations amount to 3.6 percent of the 57 billion kw-hrs of electrical energy consumed by the steel industry in 1978. This amounts to only 0.6 of the total energy (electric and nonelectric) consumed by the industry. The Agency concludes that the impacts of the energy consumed due to compliance with the proposed regulations is justified by the benefits derived from compliance with the proposed limitations and standards.

XIX. Best Management Practices (BMPs)

Section 304(e) of the Clean Water Act authorizes the Administrator to prescribe "best management practices" ("BMPs"). EPA intends to develop BMPs which are: (1) applicable to all industrial sites; (2) applicable to a designated industrial category; and (3) provide guidance to permit authorities in establishing BMPs required by unique circumstances at a given plant.

EPA is not proposing BMPs specific to the steel industry in this regulation.

XX. Upset and Bypass Provisions

An issue of recurrent concern has been whether industry guidelines should include provisions authorizing noncompliance with effluent limitations during periods of "upset" or "bypass." An upset, sometimes called an "excursion," is unintentional noncompliance occurring for reasons beyond the reasonable control of the permittee. It has been argued that an upset provision in EPA's effluent guidelines is necessary because such upsets will inevitably occur in even properly operated control equipment. Because technology-based limitations are based upon what technology can achieve, it is claimed that liability for such situations is improper. When

confronted with this issue, courts have been divided on the question of whether an explicit upset or excursion incidents may be handled through EPA's exercise of enforcement discretion. Compare *Marathon Oil Co. v. EPA*, 564 F.2d 1253 (9th Cir 1977) with *Weyerhaeuser v. Costle, supra* and *Corn Refiners Association, et al. v. Costle*, 594 F.2d 1223 (8th Cir. 1979). See also *American Petroleum Institute v. EPA*, 540 F.2d 1023 (10th Cir. 1976); *CPC International, Inc. v. Train*, 540 F.2d 1320 (8th Cir 1976); *FMC Corp. v. Train*, 539 F.2d 973 (4th Cir. 1976).

While an upset is an unintentional episode during which effluent limits are exceeded, a bypass is an act of intentional noncompliance during which waste treatment facilities are circumvented. Bypass provisions covering emergency situations have, in the past, been included in NPDES permits.

EPA has determined that both upset and bypass provisions should be included in NPDES permits and they are included in the NPDES regulations, 40 CFR § 122.60, 45 FR 33298; May 19, 1980. The upset provisions establishes an upset as an affirmative defense to prosecution for violation of technology-based effluent limitations. The bypass provision authorizes bypassing to prevent loss of life, personal injury, or severe property damage. Because this issue is resolved in the NPDES permit regulations, this proposed regulation does not address these issues.

XXI. Variances and Modifications

Upon the promulgation of the final regulation, the numerical effluent limitations for the appropriate subcategory must be included in all federal and state NPDES permits thereafter issued to steel industry direct dischargers. In addition, the pretreatment standards are directly applicable to indirect dischargers upon promulgation.

For the BPT and BCT effluent limitations, the only exception to the binding limitations is EPA's "fundamentally different factors" variance. See *E. I. duPont de Nemours and Co. v. Train*, 430 U.S. 112 (1977); *Weyerhaeuser Co. v. Costle, supra*. This variance recognizes factors concerning a particular discharger which are fundamentally different from the factors considered in this rulemaking. Although this variance clause was set forth in EPA's 1974-1976 steel industry regulations, it is now included in the NPDES regulations and will not be included in the steel or other industry regulations. See the final NPDES regulations, Act 45 FR 33290 (May 19,

1980), for the text and explanation of the "fundamentally different factors" variance.

The BAT limitations in this regulation also are subject to EPA's "fundamentally different factors" variance. In addition, BAT limitations for non-toxic and non-conventional pollutants are subject to modifications under Sections 301(c) and 301(g) of the Act. According to Section 301(j)(1)(B), applications for these modifications must be filed within 270 days after promulgation of final effluent limitations guidelines. See 40 CFR Part 125 Part D. Under Section 301(1) of the Act, these statutory modifications are not applicable to "toxic" pollutants. Likewise, limitations on nonconventional pollutants used as "indicators" for toxic pollutants are not subject to Section 301(c) or Section 301(g) modifications, unless the discharger demonstrates that a waste stream does not contain any of the toxic pollutants for which the "indicator" was designed to demonstrate removal.

Pretreatment standards for existing sources are subject to the "fundamentally different factors" variance and credits for pollutants removed by POTWs. See 40 CFR 403.7, 403.13; 43 FR 27736 (June 26, 1978). Pretreatment standards for new sources are subject only to the credits provision in 40 CFR 403.7. New source performance standards are not subject to EPA's "fundamentally different factors" variance or any statutory or regulatory modifications. See *duPont v. Train, supra*.

XXII. Relationship to NPDES Permits

The BPT, BAT, BCT, and NSPS limitations and standards in this regulation will be applied to individual steel plants through NPDES permits issued by EPA or approved state agencies under Section 402 of the Act. The preceding section of this preamble discussed the binding effect of this regulation on NPDES permits, except to the extent that variances and modifications are expressly authorized. This section describes several other aspects of the interaction of this regulation and NPDES permits.

One matter which has been subject to different judicial views is the scope of NPDES permit proceedings in the absence of effluent limitations, guidelines and standards. Under currently applicable EPA regulations, states and EPA Regions issuing NPDES permits prior to promulgation of this regulation and before June 30, 1981 must include a "reopener clause," providing for permits to be modified to incorporate "toxics" regulations when they are

promulgated. Permits issued after June 30, 1981 must meet the requirements of Sections 301(b)(2) of the Clean Water Act whether or not applicable effluent limitation guidelines have been promulgated. See 40 CFR § 122.62(c), 45 FR 33290, 33339 (May 19, 1980). At one time EPA had adopted a policy of issuing short-term permits, with a view toward issuing long-term permits only after promulgation of these and other BAT regulations. While EPA continues to encourage EPA and State permit writers to issue short-term permits to primary industry dischargers until June 30, 1981, EPA has changed its policy to allow more flexibility. See 45 FR 33340 (May 19, 1980). EPA permit writers may issue long-term permits to primary industries even if guidelines have not yet been promulgated provided that the permits require compliance with BAT and BCT limitations and contain reopener clauses. The appropriate technology levels and limitations will be assessed by the permit issuer on a case-by-case basis on consideration of the statutory factors. See *U.S. Steel Corp. v. Train*, 556 F.2d 822 (7th Cir. 1977). In these situations, EPA documents and draft documents (including these proposed regulations and supporting documents) are relevant evidence, but not binding, in NPDES permit proceedings.

With respect to the steel industry, however, the EPA has decided not to issue (and to encourage state NPDES permit issuing authorities not to issue) case-by-case NPDES permits until the final limitations are promulgated; assuming these final limitations will be promulgated no later than July 1, 1981. In event the promulgation of the final limitations is delayed beyond July 1, 1981, EPA (or the appropriate state NPDES permitting authority) would issue permits on a case-by-case basis.

Another noteworthy topic is the effect of this regulation on the powers of NPDES permit issuing authorities. The promulgation of this regulation does not restrict the power of any permit-issuing authority to act in any manner not inconsistent with law or these or any other EPA regulations, guidelines or policy. For example, the fact that this regulation does not control a particular pollutant does not preclude the permit issuer from limiting such pollutant on a case-by-case basis, when necessary to carry out the purposes of the Act. In addition, to the extent that state water quality standards or other provisions of state or Federal law require limitation of pollutants not covered by this regulation (or require more stringent limitations on covered pollutants), such limitations

must be applied by the permit-issuing authority.

EPA is evaluating the use of the water bubble concept for the steel industry. The water bubble concept is a method of developing effluent limitations that would allow dischargers to discharge greater amounts of effluent at outfalls where treatment costs are high in exchange for an equivalent decrease in effluent discharged at outfalls in the same plant where abatement is less expensive. Thus, the same amount of reduction in pollutant loadings can be obtained at less cost.

Using the water bubble concept, a discharger could discharge no more total pounds of pollutants than it could without a bubble. However, with the bubble concept the discharger would have the flexibility to allocate that discharge among its various outfalls in the least costly manner. For example, a discharger could trade an increase (above that prescribed by the effluent guidelines) of 10 pounds of pollutant X in outfall A for a decrease of 10 pounds of the same pollutant in outfall B.

In evaluating the water bubble concept for the steel industry, EPA wants to ensure that use of the concept will be equivalent in enforceability and environmental impact to control without a bubble. To ensure this equivalence, EPA is considering applying several conditions on the use of the water bubble concept:

a. *Dischargers must meet water quality standards.*

A change in the distribution of pollutant loadings among outfalls may adversely affect water quality even if total loadings do not increase. A permit writer would not approve the use of the water bubble concept if its application results in a violation of water quality standards.

b. *Trades would involve only the same pollutant.*

EPA would allow dischargers to trade a pollutant in one waste stream only against the same pollutant in another wastestream. For example, zinc would be traded for zinc, but not for chromium or lead.

c. *Each outfall must have a specific discharge limit.*

EPA would not approve applications of the water bubble concept that do not have specific enforceable limitations set for each outfall. The water bubble concept would not allow limitations to be set on a plant-wide "floating" basis.

d. *Dischargers would initiate, at their own expense, water bubble proposals during the normal permit reissuance process.*

The discharger would be responsible for developing its own water bubble

proposal. EPA would allow dischargers to make proposals only during the normal permit reissuance process. In no case would EPA allow the water bubble proposal to delay compliance with pollution control requirements.

e. *Non-complying dischargers would not be allowed to use the water bubble concept.*

Only facilities in compliance with permit conditions, on an EPA approved compliance schedule, or on a court-ordered schedule for compliance with applicable effluent limitations and current water quality standards would be eligible to use the water bubble concept.

f. *All waste streams would be required to meet applicable BPT requirements.*

Dischargers would not be allowed to meet less than BPT limits for any outfall. Thus, a plant could not decrease control of a pollutant below the outfall specific BPT limitation, even if it were able to obtain sufficient reductions of the same pollutant at another outfall.

g. *Trading between some waste streams from different subcategories would be prohibited.*

This condition would restrict potential trades of pollutants to certain subcategory wastestreams. Currently, EPA is considering prohibiting any trades with cokemaking, ironmaking, and sintering subcategories because their pollutant characteristics are of a different nature than those from other iron and steel subcategories.

Between proposal and promulgation of the steel effluent guidelines, EPA will decide whether to include specific water bubble provisions as part of the final regulation. In making this decision, EPA will evaluate any comments received on the water bubble. For specific questions about this policy, please call Richard Raines, Economic Analysis Division, (202) 755-7733.

One additional topic that warrants discussion is the operation of EPA's NPDES enforcement program, many aspects of which have been considered in developing this regulation. The Agency wishes to emphasize that, although the Clean Water Act is a strict liability statute, the initiation of enforcement proceedings by EPA is discretionary. EPA has exercised and intends to exercise that discretion in a manner which recognizes and promotes good faith compliance efforts and conserves enforcement resources so as to maximize their availability for actions against those who fail to make good faith efforts to comply with the Act.

XXIII. Summary of Public Participation

Between November 1979 and April 1980, EPA circulated nine individual volumes, which together comprise the EPA contractor's draft technical report on the bases of this proposed regulation, including available treatment alternatives and costs. The draft technical report was distributed to a number of interested parties, including the American Iron and Steel Institute and several member firms, the Natural Resources Defense Council (NRDC), and affected state and municipal authorities. This document did not include recommendations for proposed effluent limitations and standards, but rather presented the EPA Contractor's draft technical report on treatment alternatives available, costs, and other information relating to this proposed regulation. A meeting was held in Washington, D.C. on May 19, 1980 for public discussion of comments on this document.

The following general issues raised by the industry are addressed below. Special issues and technical considerations are addressed elsewhere (see Section XXIV).

1. Regulation of the Steel Industry at the BAT Level

The AISI and some of its member companies have requested that the steel industry not be regulated at the BAT level, citing the significant removal of toxic and conventional pollutant loads from raw waste loads to the proposed BPT level.

The Agency agrees that the proposed BPT level of treatment for the steel industry provides for a significant reduction in the discharges of toxic, nonconventional, and conventional pollutants. This is not surprising since those familiar with the industry are aware of the quantity of raw materials and products moved through this industry, the vast quantities of water contaminated by its operations (over six billion gallons per day), and the tremendous size and pollution potential of its processes. Hence, any significant level of pollution control is bound to demonstrate a large percentage removal of pollutants from raw waste loads.

The Agency is more concerned with the toxic, nonconventional, and conventional pollutants discharged into the environment at the proposed BPT level rather than with the percentage reduction of pollutants from raw waste loads. For the steel industry those loadings are among the highest, if not the highest, of major American industries, amounting to over 2150 tons/year of toxic organic pollutants (including cyanide), 2740 tons/year of

toxic metal pollutants, and 140,000 ton/year of nonconventional and conventional pollutants. There is more than a ninety percent reduction in the discharge of pollutants cited above from the proposed BPT limitations to the proposed BAT and BCT limitations. EPA estimates, however, that even when the steel industry complies with the proposed BAT and BCT limitations, 247 tons of toxic organic pollutants, 222 tons of toxic metal pollutants, and 10,300 tons of non-conventional and conventional pollutants will be discharged annually into the environment. These amounts are higher than the annual discharge of most other industries at their respective BPT levels of treatment.

Based upon the above considerations, the Agency believes that regulation of the steel industry at the proposed BAT level is appropriate.

2. Central Treatment

The Agency has received numerous requests from AISI and its members to create a subcategory within the proposed regulation allowing for central or combined treatment of wastewaters from various subcategories. There are two major issues associated with central treatment:

(1) The compatibility of effluent limitations for subcategories that can be effectively cotedreated; and

(2) The historical inclusion of cooling water, surface runoff, roof runoff, and other nonprocess waters in existing central treatment systems.

With respect to the first issue, the Agency recognizes that central treatment of compatible wastewaters is an effective means to achieve compliance with the proposed regulation at a cost less than would be required for separate treatment systems. Accordingly, the Agency has taken direct, positive action to facilitate central treatment where it believes central treatment is effective. The prior 1974 and 1976 regulations contained BPT effluent limitations for the various subcategories that often were not compatible from the standpoint of cotedreating similar wastewaters. These limitations are, by and large, identical to the proposed BPT limitations. The Agency did not revise these limitations for purposes of facilitating central treatment at the BPT level because it believes that co-treatment at that level of treatment is inappropriate due to the high discharge flow rates incorporated in certain BPT model treatment systems and the number of unregulated toxic pollutants.

However, at the BAT and NSPS levels, this proposed regulation directly addresses the central treatment problem by providing limitations for the same

pollutants for subcategories that can be effectively co-treated. Hence, this issue will be resolved for all levels of treatment upon promulgation of the proposed BAT and BCT limitations and NSPS. The Agency has concluded that, with adequate pretreatment where necessary, wastewaters from the following groups of subcategories can be treated together to achieve the proposed limitations:

Group and Subcategory

1. Cokemaking
2. Sintering, Iron Making
3. Steelmaking, Vacuum Degassing, Continuous Casting, Hot Forming, Pickling, Cold Rolling, Alkaline Cleaning, Hot Coatings

The Agency considered the nature of coke plant wastewaters and the biological treatment currently used to treat those wastewaters in developing the proposed BAT limitations and believes that coke plant wastewaters must be treated separately to insure the effective removal of toxic and non-conventional pollutants. Based upon the nature of toxic and non-conventional pollutants found in sintering and ironmaking wastewaters, and the treatment systems considering in developing the proposed BAT effluent limitations, the Agency believes that these wastewaters can be effectively cotedreated at the BAT level. The Agency is proposing limitations for the same pollutants in these categories to facilitate co-treatment. However, the Agency concludes that treatment of cokemaking, sintering, and ironmaking wastewaters with wastewaters from other subcategories allows for the dilution of non-conventional and toxic pollutants not found in wastewaters from the other subcategories (i.e., Ammonia-N, Cyanide, Phenolic compounds, and other organic compounds found in cokemaking wastewaters) which reduces the treatability of those pollutants, and, therefore that such co-treatment is not appropriate.

The proposed BCT and BAT limitations for the subcategories listed in Group 3 above are compatible and facilitate the implementation of extensive central treatment. Where necessary, pretreatment for the following subcategories may be required: pickling; cold rolling; and hot coatings.

The Agency has decided not to oppose the establishment a central treatment subcategory in the proposed regulation. There are numerous combinations of wastewater treatment systems that can be and are being employed ranging from individual

recycle systems followed by central treatment of blowdowns and once-through flows, to total plant-wide recycle systems with treatment of the blowdown. These combinations are so numerous, that it is not possible for the Agency to regulate effectively the discharge of toxic pollutants at the BAT level with a central treatment subcategory. The only feasible means of limiting discharges from those treatment systems is to establish limitations based on pollutant concentrations. However, the use of concentration limitations alone cannot provide for effective limitation of toxic pollutant discharges since those limitations do not regulate discharge flow. The reduction in discharge flow provides most of the toxic pollutant loading removal to be achieved by industry's compliance with the proposed BAT and BCT limitations.

In all cases, the limitations applicable to a central treatment facility should be the sum of the applicable effluent loading limitations for the individual subcategory processes tributary to the central treatment facility.

Based upon the above considerations, the Agency believes that the development of a central treatment subcategory which provides for effective regulation of toxic pollutants is not possible or necessary. However, the Agency has made central treatment possible under the proposed BAT, BCT, and NSPS limitations and standards by carefully selecting the toxic pollutants to be limited for those subcategories that have compatible wastes.

As noted above, the second major issue pertaining to central treatment is the historical inclusion of cooling water, surface runoff and roof runoff in central treatment systems. While separation of these non-process waters has been accomplished at many steel plants and even at many older steel plants, it may be inordinately expensive to do so at a small number of plants.

The Agency believes its model treatment system cost estimates, which are based upon the more costly separate treatment systems for each subcategory, are sufficiently generous to cover all site-specific and retrofit costs associated with upgrading most existing central treatment systems to the point where the proposed BAT limitations can be achieved. However, there may be instances where, because of unique site-specific factors, the proposed BAT limitations may not be achievable without the expenditure of amounts significantly higher than those estimated by the Agency. In such instances, the Agency believes that the plants should receive alternative BAT limitations.

In establishing alternative BAT limitations for a particular plant the Agency would evaluate the existing central treatment system on a site-specific basis by the following three steps.

(1) Computing the applicable BAT effluent limitations by summing the allowable effluent loadings for each subcategory process tributary to the central treatment facility.

(2) Requiring separation of those non-process flows that can reasonably be accomplished.

(3) Adjusting recycle rates for the remaining flows and requiring appropriate blowdown treatment to achieve the applicable effluent limitations.

Where surface and roof runoff have not been separated from process wastewaters, surge capacity can be provided prior to recycle to maintain low blowdown rates. In extreme cases it may be necessary to provide for additional flow allowances during rainfall events.

There are two stages at which the Agency can evaluate whether a particular plant or central treatment facility should be subject to effluent limitations less stringent than the generally applicable BAT limitations. The Agency could, where feasible, identify certain plants in the final regulation for which alternative limitations are appropriate, and establish limitations for those facilities. If the Agency finds that it can, from a practical standpoint, resolve this issue in the regulation, it will do so. Alternatively, the Agency could resolve this issue at the permit writing stage. The discharges could apply for a "fundamentally different factor" variance under 40 CFR § 125.31(b)(3). For example, if the cost of segregating the non-process waters and installing the BAT model technologies, or otherwise achieving compliance with the appropriate BAT limitations, would be "wholly out of proportion" to the Agency's estimated cost, the discharger may obtain relief from the generally applicable limitations. Under the variance procedure, the permit writer would evaluate the existing central treatment system and alternative treatment approaches, and propose alternative limitations for that facility on a case-by-case basis.

As stated previously, the Agency would like to resolve this issue under the first approach. The Agency met with representatives of AISI and its member companies regarding those plants which they believed were entitled to alternative effluent limitations or inclusion in a central treatment

subcategory. At those meetings, the industry representatives presented data for more than thirty plants. Based upon those data and its independent analysis of the problem, the Agency has identified seven plants which it believes may be entitled to relief from the generally applicable limitations. They are as follows:

Plant	Locations	Central treat facility
1. Armco Steel.....	Ashland, KY.....	Total plant
2. Bethlehem Steel.....	Sparrows Point, MD.....	Humphrey's Creek
3. Bethlehem Steel.....	Burns Harbor.....	Total plant
4. National Steel.....	Granite City, IL.....	Total plant
5. Republic Steel.....	Gadsden, AL.....	Total plant
6. U.S. Steel.....	Lorain, OH.....	Pipe mill lagoon
7. U.S. Steel.....	Provo, UT.....	Total plant

The Agency is continuing to analyze whether these or any other plants should have alternative limitations, and if so, what those limitations should be. If it determines that alternative limitations are appropriate, it will give notice of those proposed alternative limitations and provide an opportunity for comment.

The Agency is soliciting comments regarding whether these plants, or any other plants should have alternative limitations. The commenter should provide the following information for each plant:

(1) A schematic diagram of the existing wastewater treatment facility showing each major treatment component;

(2) Flow rates;

(3) A scale map of the area of the plant served by the wastewater treatment facility, including the treatment facility and water supply and discharge points;

(4) An estimate of the capital investment required to meet the proposed BAT limitations for the facility; and

(5) The effluent limitations which could be achieved if the discharger were to spend an amount equal to the Agency's model treatment system cost estimate for the facility and the treatment facilities which would be used to meet those limitations.

3. Consumptive use of Water.

a. One commenter suggested that EPA had failed to consider adequately, the impact of the proposed limitations on water consumption. The commenter contends that EPA has failed to estimate accurately the water consumption associated with industry's compliance with the proposed limitations, failed to consider the adverse impact which this water consumption would have on users of water downstream from the

commenter, and failed to account generally for the water scarcity problems of the arid and semi-arid western states.

In response to the court's remand on this issue, EPA undertook an extensive analysis of the water consumption impact of this proposed regulation. The manner in which the Agency examined this issue, and the bases for its conclusions, are presented in detail in Section III of Volume 1 of the Development Document. The Agency estimated the water that will be consumed by the various water pollution control systems available for use in the steel industry. Based on the assumption that the industry will use evaporative cooling devices, the Agency estimates the water loss to be only 0.07% of the daily flow of steel industry process waters at the BPT level and 0.25% of daily flow at the BAT level. On the other hand, by proposing the limitations at their present level, the process water intake flow of steel industry will decrease by 40%, thus precluding approximately 3 billion gallons per day from becoming contaminated by steel industry processes.

Moreover, the Agency surveyed the following four steel plants which it considers to be the only major plants located in arid or semi-arid regions of the country.

- 0196A CF&I Steel Corporation, Pueblo, Colorado
- 0443A Kaiser Steel Corporation, Fontana, California
- 0492A Lone Star Steel Company, Lone Star, Texas
- 0884A United States Steel Corporation, Provo, Utah

Based upon information provided by these companies, the Agency found that nearly all of the recycle and evaporative cooling systems included in the model treatment systems used to develop the proposed limitations and standards have been installed at these plants. Consequently, the incremental water consumption associated with compliance with the proposed limitations and standards is either minimal or non-existent for plants located in arid or semi-arid regions.

Although the commenter noted above suggested the Agency failed to account for water consumption associated with "drift" (as opposed to evaporation) from wet cooling towers, that loss of water was accounted for in the Agency's estimate of water consumption. (0.1% of flow).

The commenter also suggested that the increased water consumption which will result from compliance with the proposed regulation will adversely

effect downstream users of water including agricultural and industrial users. Beyond the Agency's determination that the adverse impacts associated with the estimated increase in water consumption is justified by the benefit of reducing the pollutant load discharged to meet the proposed limitations, EPA is not able to consider properly the site specific factors cited by the commenter. Such site specific non-water quality environmental factors may be considered in a request for a variance by an NPDES permit applicant (See 40 CFR 125, Subpart D). The Agency notes that the commenter is located in a state which has been delegated the authority to administer the NPDES program. The permitting authority which will issue the permit and consider any requests for a variance is uniquely suited to account for the regional and state concerns cited by the commenter.

b. The commenter also suggests that the Agency is ignoring Section 101(g) of the CWA by proposing limitations which will result in increased water consumption. The commenter suggests that Section 101(g) recognizes the primacy of state water laws and allocation systems over the CWA.

EPA does not agree with the commenter's conclusion regarding the primacy of state water laws over the CWA. The court, in *AISI II*, noted the primacy of the CWA over state water laws based upon the Supremacy Clause of the U.S. Constitution. That conclusion is equally applicable now and the existence of state water laws does not prohibit EPA from establishing limitations which incidentally involve the consumptive use of water. The Agency does, however, understand that Congress intended that EPA not unnecessarily interfere with those rights. It is noteworthy that EPA is preparing a report to Congress under Section 102(D) of the CWA regarding measures to coordinate water quality and water quantity issues and policies. This report demonstrates the Agency's continued sensitivity to this issue and its efforts to accommodate both goals.

XXIV. Solicitation of Comments

EPA invites and encourages public participation in this rulemaking. The Agency asks that any deficiencies in the record of this proposal be pointed to with specificity and that suggested revisions or corrections be supported by data.

EPA is particularly interested in receiving additional comments and information on the following issues:

A. General Issues

1. Whether the proposed limitations and standards for each of the subcategories are appropriate. Specifically, the Agency solicits comments on whether the proposed BPT limitations for the following operations, which are less stringent than those contained in prior regulations, are appropriate: (a) cokemaking—by-product; (b) sintering; (c) open hearth—wet

2. Whether the Agency has accurately estimated the cost of compliance with the proposed limitations and standards including site-specific costs, retrofit costs, and any other costs of compliance with the regulation.

3. Whether the pollutants proposed for limitation in each subcategory are appropriate. Specifically, the Agency solicits comments regarding the use of indicator pollutants and whether the indicator pollutants selected are appropriate.

4. In establishing limitations for the pickling, scale removal, alkaline cleaning, cold rolling, and hot coating operations, the Agency used production tonnage as a normalizing basis. The Agency does not have sufficient data available to develop effluent limitations on the basis of product surface area. While the Agency understands that product surface area data are not universally available throughout the industry, the Agency solicits comments on whether establishing limitations on that basis is appropriate, how those limitations could be established, and the data with which they could be established.

5. EPA is evaluating the use of the water bubble policy for the steel industry. Section XXII contains a discussion of how the policy might work and possible conditions for its application. EPA solicits comments on all aspects of the use of the water bubble policy in the steel industry. In particular, EPA solicits comments on the following issues:

a. Will the steel industry benefit from use of the water bubble concept? Comments are solicited on the amounts which specific plants may save using the water bubble concept.

b. What conditions for applying the water bubble concept are needed to ensure that it is equivalent in enforceability and water quality impact to control without a bubble? Comments are solicited on the possible conditions for its application which are described in Section XXII.

c. Can the water bubble concept be implemented without excessive

administrative burden on the EPA or state permit issuing authorities?

6. Whether the definitions of steel industry processes and products contained in the proposed regulation are sufficiently specific to identify their applicability.

B. Subcategory Specific Issues

1. Cokemaking.

a. Whether separate BAT limitations for existing full-scale physical-chemical treatment systems incorporating granular activated carbon adsorption are warranted; or whether BAT limitations based upon biological treatment should be universally applicable.

b. The Agency has recently obtained data which indicate that the proposed BAT limitations for cokemaking may be achieved with single-stage biological treatment systems similar to those contained in the model BPT treatment systems. The Agency expects that the costs for such systems will be substantially less than those for the model BAT treatment systems. The Agency solicits comments regarding: (i) whether or not single stage biological treatment similar to that used in the BPT model treatment systems can be used with post filtration to attain the proposed BAT limitations; and (ii) if such systems cannot achieve the proposed BAT limitations, what BAT limitations would be appropriate for these systems.

2. Ironmaking.

a. Whether the proposed BCT, BAT, NSPS, PSES, and PSNS limitations are appropriate for both ferromanganese and ironmaking blast furnaces.

b. The Agency is soliciting comments on whether it would be appropriate to promulgate a new source performance standard and a pretreatment standard for new sources of zero discharge based upon evaporation of blast furnace blowdown on slag.

3. *Vacuum Degassing.*—The Agency found a vacuum degassing plant that achieves zero discharge using the treatment system components identified by the Agency as the model BPT system. Accordingly, the Agency solicits comments on whether zero discharge limitations and standards should be promulgated as BAT, BCT, NSPS, PSES, and PSNS for the vacuum degassing subcategory based upon the demonstrated performance of this plant. No costs beyond those required for compliance with the proposed BPT limitations would be necessary to achieve zero discharge for vacuum degassing operations.

4. *Continuous Casting.*—The Agency found that about twenty-five percent of

the continuous casting plants achieve zero discharge using the treatment system components identified by the Agency as the model BPT system. Accordingly, the Agency solicits comments on whether zero discharge limitations and standards should be promulgated as BAT, BCT, NSPS, PSES, and PSNS for the continuous casting subcategory based upon the demonstrated performance of these plants. No costs beyond those required for compliance with the proposed BPT limitations would be necessary to achieve zero discharge for continuous casting operations.

5. Hot Forming.

a. The Agency found that the following number of hot forming mills achieve zero discharge using the treatment system components identified by the Agency as BPT, BAT, and BCT model treatment systems:

Subdivision and Number of Mills

Primary—3

Section—9

Flat—1

Pipe and Tube—1

Accordingly, the Agency solicits comments on whether zero discharge limitations and standards should be promulgated as BAT, BCT, NSPS, PSES and PSNS for any or all of the hot forming subdivisions. No costs beyond those required to achieve compliance with the proposed BPT, BAT, and BCT limitations would be necessary to achieve zero discharge for hot forming operations.

b. The Agency is proposing BAT, NSPS, PSES, and PSNS limitations and standards for toxic metal pollutants for the hot forming subcategory. Several commenters have suggested that hot forming operations for carbon steel products do not contribute any toxic metal pollutants to its wastewaters. They therefore contend that the proposed BAT, NSPS, PSES, and PSNS limitations and standards are not appropriate for those operations. The Agency believes that its data clearly indicate that both carbon and specialty steel hot forming operations contribute toxic metal pollutants to its process wastewaters above treatability levels. These data indicate the hot forming operations can contribute about 1,670 tons/year of toxic metal pollutants at the proposed BPT level and that these discharges can be reduced to about 90 tons/year at the proposed BAT Level. The Agency solicits comments on the following issues:

(1) Whether hot forming operations should be subdivided between carbon steel and specialty steel operations to a greater degree than is currently

contemplated in this proposed regulation.

(2) Whether, and to what extent, carbon and specialty steel operations contribute toxic metal pollutants to process wastewaters.

The Agency is interested in any relevant data which bears on these issues. To the extent that any commenter would like to conduct sampling activities and submit data prior to the close of the comment period, the Agency will provide direction regarding the appropriation sampling points for particular facilities.

6. Cold Rolling.

a. The Agency has received comments indicating that product quality requirements may be limiting factors in achieving the discharge flows which may be required to achieve the proposed limitations. However, the Agency has insufficient documentation or data to support this claim. Hence, the Agency solicits data and documentation on this issue.

b. Based upon available data, the Agency believes that the toxic organic pollutant contamination of selected cold rolling operation wastewaters is attributable to the type of rolling and coating solutions applied to the various steel products. However, the agency has found that some cold rolling operation wastewaters are not contaminated by those pollutants. The Agency is continuing to investigate this issue. The Agency solicits data and documentation on whether toxic organic pollutant-free rolling solutions can be used in most or all cold rolling operations.

7. *Hot Coatings.*—The Agency found several hot coating operations without fume scrubbers in the following subdivisions which achieve zero discharge using the treatment system components identified by the Agency as the BPT model system:

Subdivision and Product Type

Galvanizing—Strip, sheet, and miscellaneous products, wire products and fasteners

Other coatings—Strip, sheet, and miscellaneous products

Accordingly, the Agency solicits comments on whether the hot coatings subcategory should be further subdivided and whether zero discharge limitations and standards should be promulgated as BAT, BCT, NSPS, PSES, and PSNS for those segments of the hot coatings subcategory where zero discharge has been demonstrated. No costs beyond those required for compliance with the proposed BPT limitations would be necessary to achieve zero discharge for those hot coatings operations.

In addition, the Agency has prepared a compilation of responses to comments received on the October 1979 draft technical report. This compilation is available from Ernst P. Hall, Effluent Guidelines Division (WH-552), Environmental Protection Agency, 401 M Street, Washington, D.C. 20460 (Phone: 202-426-2586). The Agency is also soliciting additional comments on each of the specific issues raised in these comments and the three general issues raised in Section XXIII.

Dated: December 24, 1980.

Douglas M. Costle,
Administrator.

Appendix A—Abbreviations, Acronyms and Other Terms Used in This Notice

ACT—The Clean Water Act.

AGENCY—The U.S. Environmental Protection Agency.

BAT—The best available technology economically achievable under Section 304(b)(2)(B) of the Act.

BCT—The best conventional pollutant control technology, under Section 304(b)(4) of the Act.

BMP—Best management practices under Section 304(e) of the Act.

BPT—The best practicable control technology currently available under Section 304(b)(1) of the Act.

Clean Water Act—The Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251 *et seq.*) as amended by the Clean Water Act of 1977 (Public Law 95-217).

Direct Discharger—A facility which discharges or may discharge pollutants directly into waters of the United States.

Indirect Discharger—A facility which introduces or may introduce pollutants into a publicly owned treatment works.

NPDES Permit—A National Pollutant Discharge Elimination System permit issued under Section 402 of the Act.

NSPS—New source performance standards under Section 306 of the Act.

POTW—Publicly owned treatment works.

PSES—Pretreatment standards for existing sources of indirect discharges under Section 307(b) of the Act.

PSNS—Pretreatment standards for new sources of direct discharges under Section 307(b) and (c) of the Act.

RCRA—Resource Conservation and Recovery Act (PL 94-580) of 1976, Amendments to Solid Waste Disposal Act.

Appendix B.—Development of Regulated Pollutant List Iron and Steel Industry

No.	Pollutant	Not detected	Unique occurrence	Not treatable	Regulation considered
001	Acenaphthene	-	-	X	-
002	Acrolein	X	-	-	-
003	Acrylonitrile	-	-	-	X
004	Benzene	-	-	-	X
005	Benzidine	X	-	-	-
006	Carbon Tetrachloride	-	-	X	-
007	Chlorobenzene	X	-	-	-
008	1,2,4-Trichlorobenzene	X	-	-	-

Appendix B.—Development of Regulated Pollutant List Iron and Steel Industry—Continued

No.	Pollutant	Not detected	Unique occurrence	Not treatable	Regulation considered
009	Hexachlorobenzene	-	-	-	X
010	1,2-Dichloroethane	-	-	X	-
011	1,1,1-Trichloroethane	-	-	-	X
012	Hexachloroethane	X	-	-	-
013	1,1-Dichloroethane	-	-	X	-
014	1,1,2-Trichloroethane	-	X	-	-
015	1,1,2,2-Tetrachloroethane	-	-	X	-
016	Chloroethane	X	-	-	-
017	Bis(chloromethyl) ether	X	-	-	-
018	Bis(2-chloroethyl) ether	X	-	-	-
019	2-Chloroethyl vinyl ether	X	-	-	-
020	2-Chloronaphthalene	-	-	X	-
021	2,4,6-Trichlorophenol	-	-	X	-
022	Parachlorometacresol	-	-	-	X
023	Chloroform	-	-	-	X
024	2-Chlorophenol	-	-	-	X
025	1,2-Dichlorobenzene	-	-	X	-
026	1,3-Dichlorobenzene	X	-	-	-
027	1,4-Dichlorobenzene	-	-	X	-
028	3,3'-Dichlorobenzidine	X	-	-	-
029	1,1-Dichloroethylene	-	X	-	-
030	1,2-Transdichloroethylene	-	-	X	-
031	2,4-Dichlorophenol	-	-	X	-
032	1,2-Dichloropropane	X	-	-	-
033	1,2-Dichloropropylene	X	-	-	-
034	2,4-Dimethylphenol	-	-	-	X
035	2,4-Dinitrotoluene	-	-	-	X
036	2,6-Dinitrotoluene	-	-	-	X
037	1,2-Diphenylhydrazine	-	-	X	-
038	Ethylbenzene	-	-	-	X
039	Fluoranthene	-	-	-	X
040	4-Chlorophenylphenyl ether	X	-	-	-
041	4-Bromophenylphenyl ether	X	-	-	-
042	Bis(2-chloroisopropyl) ether	X	-	-	-
043	Bis(2-chloroethoxy)methane	X	-	-	-
044	Methylenechloride	-	-	X	-
045	Methyl chloride	X	-	-	-
046	Methyl bromide	X	-	-	-
047	Bromoform	X	-	-	-
048	Dichlorobromomethane	-	-	X	-
049	Trichlorofluoromethane	X	-	-	-
050	Dichlorodifluoromethane	X	-	-	-
051	Chlorodibromomethane	X	-	-	-
052	Hexachlorobutadiene	X	-	-	-
053	Hexachlorocyclopentadiene	X	-	-	-
054	Isophorone	-	-	-	X
055	Naphthalene	-	-	-	X
056	Nitrobenzene	-	-	X	-
057	2-Nitrophenol	-	-	-	X
058	4-Nitrophenol	-	-	X	-
059	2,4-Dinitrophenol	-	-	X	-
060	4,6-Dinitro-o-cresol	-	-	-	X
061	N-Nitrosodimethylamine	X	-	-	-
062	N-Nitrosodiphenylamine	X	-	-	-
063	N-Nitrosod-n-propylamine	X	-	-	-
064	Pentachlorophenol	-	-	-	X
065	Phenol	-	-	-	X

Appendix B.—Development of Regulated Pollutant List Iron and Steel Industry—Continued

No.	Pollutant	Not detected	Unique occurrence	Not treatable	Regulation considered
066	Bis(2-ethylhexyl) phthalate	-	-	-	X
067	Butyl benzylphthalate	-	-	-	X
068	Di-n-butylphthalate	-	-	-	X
069	Di-n-octylphthalate	-	-	-	X
070	Diethylphthalate	-	-	-	X
071	Dimethylphthalate	-	-	-	X
072	Benzo(a)anthracene	-	-	-	X
073	Benzo(a)pyrene	-	-	-	X
074	3,4-Benzofluoranthene	-	X	-	-
075	Benzo(k)fluoranthene	-	X	-	-
076	Chrysene	-	-	-	X
077	Acenaphthylene	-	-	-	X
078	Anthracene	-	-	-	X
079	Benzo(ghi)perylene	-	X	-	-
080	Fluorene	-	-	-	X
081	Phenanthrene	-	-	-	X
082	Dibenzo(a,h)anthracene	-	X	-	-
083	Indeno(1,2,3-cd)pyrene	-	X	-	-
084	Pyrene	-	-	-	X
085	Tetrachloroethylene	-	-	-	X
086	Toluene	-	-	-	X
087	Trichloroethylene	-	-	X	-
088	Vinyl chloride	-	X	-	-
089	Aldrin	-	X	-	-
090	Dieldrin	-	X	-	-
091	Chlordane	-	X	-	-
092	4,4'-DDT	-	X	-	-
093	4,4'-DDE	-	X	-	-
094	4,4'-DDD	-	X	-	-
095	a-endosulfan-Alpha	-	X	-	-
096	b-endosulfan-Beta	-	X	-	-
097	Endosulfansulfate	-	X	-	-
098	Endrin	-	X	-	-
099	Endrin aldehyde	-	X	-	-
100	Heptachlor	-	X	-	-
101	Heptachlor epoxide	-	X	-	-
102	a-BHC-Alpha	-	X	-	-
103	b-BHC-Beta	-	X	-	-
104	R-BHC-Gamma	-	X	-	-
105	g-BHC-Delta	-	X	-	-
106	PCB-1242	-	X	-	-
107	PCB-1254	-	X	-	-
108	PCB-1221	-	X	-	-
109	PCB-1232	-	X	-	-
110	PCB-1248	-	X	-	-
111	PCB-1260	-	X	-	-
112	PCB-1016	-	X	-	-
113	Toxaphene	-	X	-	-
114	Antimony	-	-	-	X
115	Arsenic	-	-	-	X
116	Asbestos	X	-	-	-
117	Beryllium	-	-	X	-
118	Cadmium	-	-	-	X
119	Chromium	-	-	-	X
120	Copper	-	-	-	X
121	Cyanide	-	-	-	X
122	Lead	-	-	-	X
123	Mercury	-	-	X	-
124	Nickel	-	-	-	X
125	Selenium	-	-	-	X
126	Silver	-	-	-	X
127	Thallium	-	-	-	X
128	Zinc	-	-	-	X
129	2,3,7,8-Tetrachlorodibenzo-p-dioxin	X	-	-	-
130	Xylene	-	-	-	X
	Aluminum	-	-	-	X
	Ammonia	-	-	-	X
	Dissolved Iron	-	-	-	X
	Fluoride	-	-	-	X
	Hexavalent Chromium	-	-	-	X
	Manganese	-	X	-	-
	Oil and Grease	-	-	-	X
	pH	-	-	-	X
	Phenolic Compounds	-	-	-	X
	Sulfide	-	-	-	X
	Total Suspended Solids	-	-	-	X

Key:
X indicates heading which applies to pollutant.

-Indicates heading which does not apply to pollutant.
 Not Detected: Not detected in any raw waste samples analyzed.
 Unique Occurrence: Found at one or two plants at low levels.
 Not Treatable: Detected at levels below practical treatability levels.
 Reg. Considered: Found in average concentrations of greater than 10ppb in at least one iron and steel subcategory.

Appendix C.—Regulated Pollutant List, Iron and Steel Industry

- A. Cokemaking
 - Total Suspended Solids
 - Oil & Grease
 - Ammonia
 - Cyanide
 - Phenols (4AAP)
 - Benzene
 - Naphthalene
 - Benzo(a)pyrene
 - pH
- B. Sintering
 - Total Suspended Solids
 - Oil & Grease
 - Ammonia
 - Cyanide
 - Phenols (4AAP)
 - Total Residual Chlorine
 - Lead
 - Zinc
 - pH
- C. Ironmaking
 - Total Suspended Solids
 - Oil & Grease
 - Ammonia
 - Cyanide
 - Phenols (4AAP)
 - Total Residual Chlorine
 - Lead
 - Zinc
 - pH
- D. Steelmaking
 - 1. Basic Oxygen Furnace
 - Total Suspended Solids
 - Chromium
 - Lead
 - Zinc

- pH
- 2. Open Hearth Furnace
 - Total Suspended Solids
 - Chromium
 - Lead
 - Zinc
 - pH
- 3. Electric Arc Furnace
 - Total Suspended Solids
 - Chromium
 - Lead
 - Zinc
 - pH
- E. Vacuum Degassing
 - Total Suspended Solids
 - Chromium
 - Lead
 - Zinc
 - pH
- F. Continuous Casting
 - Total Suspended Solids
 - Oil & Grease
 - Chromium
 - Lead
 - Zinc
 - pH
- Hot Forming
 - Total Suspended Solids
 - Oil & Grease
 - Chromium
 - Lead
 - Zinc
 - pH
- H. Scale Removal
 - 1. Kolene
 - Total Suspended Solids
 - Chromium
 - pH
 - 2. Hydride
 - Total Suspended Solids
 - Cyanide
 - Chromium
 - Lead
 - pH
- I. Sulfuric Acid Pickling
 - Total Suspended Solids

- Chromium
- Lead
- Zinc
- pH
- J. Hydrochloric Acid Pickling
 - Total Suspended Solids
 - Chromium
 - Lead
 - Zinc
 - pH
- K. Combination Acid Pickling
 - Total Suspended Solids
 - Fluoride
 - Chromium
 - Copper
 - Nickel
 - pH
- L. Cold Rolling
 - 1. Recirculation and Combination
 - Total Suspended Solids
 - Oil & Grease
 - Chromium
 - Lead
 - Zinc
 - 1,1,1-Trichlorophenol
 - 2-Nitrophenol
 - Anthracene
 - Tetrachloroethylene
 - pH
 - 2. Direct Application
 - Total Suspended Solids
 - Oil & Grease
 - Chromium
 - Zinc
 - pH
- M. Alkaline Cleaning
 - Total Suspended Solids
 - Dissolved Iron
 - pH
- N. Hot Coating
 - Total Suspended Solids
 - Oil & Grease
 - Cadmium
 - Chromium
 - Lead
 - Zinc
 - pH

Appendix D.—Iron and Steel Model Treatment Summary

Subcategory	Levels of treatment					
	BPT	BAT	BCT	NSPS	PSNS	PSES
A. Cokemaking:						
1. By-product	Fixed still, recycle final cooler, settling basin, acid neutralization, single stage bio-oxidation, clarifier, vacuum filter.	Extended bio-oxidation recycle of barometric condenser, clarifier, filter.	(*)	(*)	(*)	(*)
2. Beehive	Settling basin, 100% recycle	(*)	(*)	(*)	(*)	(*)
B. Sintering	Polymer, thickener, vacuum filter, 93% recycle, acid neutralization.	95% recycle, lime addition, alkaline chlorination, clarifier, acid neutralization (from BPT system), filter, dechlorination.	95% recycle, filter	(*)	(*)	(*)
C. Ironmaking	Polymer, thickener, vacuum filter, cooling tower, 96% recycle.	98% recycle, lime addition, alkaline chlorination, clarifier, acid neutralization filter, dechlorination.	98% recycle clarifier.	(*)	(*)	(*)
D. Steelmaking:						
All semi-wet operations	Lime neutralization (open hearth operations only) polymer, clarifier/thickener, vacuum filter, 100% recycle.	(*)	(*)	(*)—for BOF, EAF, (*)—for OH	(*)	(*)
Basic Oxygen Furnace (Wet)	Polymer, clarifier/thickener, vacuum filter, 95% recycle, acid neutralization.	Lime neutralization, inclined plate separator, filter, acid neutralization (from BPT system).	Filter	(*)	(*)	(*)
Open Hearth Furnace (Wet)	Lime neutralization and polymer addition, clarifier/thickener, vacuum filter, 94% recycle.	Lime addition, inclined plate separator, filter.	Filter	(*)	(*)	(*)

Appendix D.—Iron and Steel Model Treatment Summary—Continued

Subcategory	Levels of treatment					
	BPT	BAT	BCT	NSPS	PSNS	PSES
Electric Arc Furnace (Wet)	Polymer, clarifier/thickener, vacuum filter, 96% recycle.	Lime addition, inclined plate separator, filter.				
E. Vacuum Degassing	Scale pit, cooling tower, 96% recycle.	Filter.	(¹)	(¹)	(¹)	(¹)
F. Continuous Cooling	Scale pit, 96% recycle, flat bed filter, cooling tower.	99% recycle, Filter.	(¹)	Scale pit, 99% recycle, flat bed filter, cooling tower.	(¹)	(¹)
G. Hot Forming:						
Model 1	Scale pit, 50% recycle, clarifier, vacuum filter, filter.	Cooling tower, 96% recycle.	(¹)	Scale pit, recycle, roughing clarifier, vacuum filter, cooling tower, recycle filter blowdown.	(¹)	(¹)
Model 2	Scale pit, clarifier, vacuum filter, filter.	Cooling tower, 96% recycle.	(¹)	Scale pit, recycle, roughing clarifier, vacuum filter, cooling tower, recycle filter blowdown.	(¹)	(¹)
Model 3	Scale pit, 50% recycle, settling lagoon.	Cooling tower, 96% recycle, filter.	(¹)	Scale pit, recycle, roughing clarifier, vacuum filter, cooling tower, recycle filter blowdown.	(¹)	(¹)
H. Scale Removal:						
1. Kolene	Oil skimming, acid addition, chromium, reduction, lime, polymer, thickener, vacuum filter.	Filter.	(¹)	(¹) (except settling basin in place of thickener).	(¹)	(¹)
2. Hydride	Cyanide oxidation, acid and polymer addition, thickener, vacuum filter.	Filter.	(¹)	(¹) (except settling basin in place of thickener).	(¹)	(¹)
I. Acid Pickling:						
1. Sulfuric:						
a. Neutralization	Spent pickle liquor storage tank, FHS recycle, equalization of SPL, rinse water and fume hood scrubber blowdown, lime and polymer addition, aeration, settling basin.	Cascade Rinse.	(¹)	Acid recovery system (acid discharge).	(¹)	(¹) (except clarifier and vacuum filter in place of settling basin).
b. Acid Recovery	Spent acid storage system, cascade rinse, PHS recycle, acid recovery system (zero discharge).	(¹)	(¹)	(¹)	(¹)	(¹)
2. Hydrochloric:						
a. Neutralization	Spent pickle liquor storage tank, FHS recycle, equalization of SPL, rinse water and fume hood scrubber blowdown, lime and polymer addition, aeration, thickener, vacuum filter.	Cascade Rinse.	Batch—(¹) Continuous—(¹) plus a filter.	(¹) (except clarifier in place of thickener).	(¹)	(¹)
b. Acid regeneration	Spent acid storage tank, acid regeneration systems, FHS recycle, equalization tank, lime and polymer addition, aeration, thickener, vacuum filter.	Cascade Rinse, AVS recycle.	(¹) plus a filter.	(¹) (except clarifier in place of thickener).	(¹)	(¹)
3. Combination	Spent pickle liquor storage tank, FHS recycle, equalization of SPL, rinse water and fume hood scrubber blowdown, oil skimmer, lime and polymer, clarifier, vacuum filter.	Cascade Rinse.	(¹)	(¹)	(¹)	(¹) (except no oil skimmer is provided).
J. Cold Forming:						
1. Cold Rolling	Alum, acid (for emulsion breaking), lime and polymer, air flotation, settling basin.	Filter.	Recirculation: (¹) Direct application and combination (¹).	(¹) and the requirement all new mills will be of the recirculation type.	(¹)	(¹)
2. Pipe and Tube:						
a. Water	Scale pit, oil skimmer, 100% recycle.	(¹)	(¹)	(¹)	(¹)	(¹)
b. Oil	Scale pit, oil skimmer, recycle waste oil storage tank (contractor removal as required).	(¹)	(¹)	(¹)	(¹)	(¹)
K. Alkaline Cleaning	Equalization tank with oil skimmer, acid and polymer, thickener, vacuum filter.	(¹)	(¹)	Equalization tank with oil skimmer, acid, polymer, aeration, settling basin, vacuum filter, filter.	(¹)	(¹)
L. Hot Casting	Lime and polymer, thickener, vacuum filter.	FHS recycle, Cascade Rinse.	Same as BAT plus a filter (¹). Same as BPT (¹). Same as BAT (¹).	(¹)	(¹)	(¹)

¹No standards/limitations are presently proposed, therefore, no treatment model considered. ²Same as BPT. ³Same as BAT. ⁴Same as BPT plus BAT. ⁵Same as NSPS. ⁶Only general pretreatment standards as proposed. ⁷Approximately 60% of the iron making plants are expected to install 98% recycle and slag evaporation in place of BAT. ⁸Applies to all galvanizing operations with and without scrubber, lime and other metals for sheet and strip operations with scrubbers. ⁹Applies to all other metal coating operations without scrubbers. ¹⁰Applies to lime sheet and strip operations without scrubbers, other metal coating operations, wire products and fasteners with scrubbers.

SPL: Spent Pickle Liquor. AVS: Absorber Vent Scrubber. FHS: Fume Hood Scrubber.

EPA proposes to amend Part 420 of CFR to read as follows:

**PART 420—IRON AND STEEL
MANUFACTURING POINT SOURCE
CATEGORY**

General Provisions

Sec.

- 420.01 Applicability.
420.02 General Definitions.

Subpart A—Cokemaking Subcategory

- 420.10 Applicability; description of the cokemaking subcategory.
420.11 Specialized definitions.
420.12 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.13 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
420.14 New source performance standards (NSPS).
420.15 Pretreatment standards for existing sources (PSES).
420.16 Pretreatment standards for new sources (PSNS).
420.17 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart B—Sintering Subcategory

- 420.20 Applicability; description of the sintering subcategory.
420.21 Specialized definitions.
420.22 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.23 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
420.24 New source performance standards (NSPS).
420.25 Pretreatment standards for existing sources (PSES).
420.26 Pretreatment standards for new sources (PSNS).
420.27 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart C—Ironmaking Subcategory

- 420.30 Applicability; description of the ironmaking subcategory.
420.31 Specialized definitions.
420.32 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.33 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).

- 420.34 New source performance standards (NSPS).
420.35 Pretreatment standards for existing sources (PSES).
420.36 Pretreatment standards for new sources (PSNS).
420.37 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart D—Steelmaking Subcategory

- 420.40 Applicability; description of the steelmaking subcategory.
420.41 Specialized definitions.
420.42 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.43 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
420.44 New source performance standards (NSP).
420.45 Pretreatment standards for existing sources (PSES).
420.46 Pretreatment standards for new sources (PSNS).
420.47 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart E—Vacuum Degassing Subcategory

- 420.50 Applicability; description of the vacuum degassing subcategory.
420.51 Specialized definitions.
420.52 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.53 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
420.54 New source performance standards (NSPS).
420.55 Pretreatment standards for existing sources (PSES).
420.56 Pretreatment standards for new sources (PSNS).
420.57 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart F—Continuous Casting Subcategory

- 420.60 Applicability; description of the continuous casting subcategory.
420.61 Special definitions.
420.62 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.63 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available

technology economically achievable (BAT).

- 420.64 New source performance standards (NSPS).
420.65 Pretreatment standards for existing sources (PSES).
420.66 Pretreatment standards for new sources (PSNS).
420.67 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart G—Hot Forming Subcategory

- 420.70 Applicability; description of the hot forming subcategory.
420.71 Specialized definitions.
420.72 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.73 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
420.74 New source performance standards (NSPS).
420.75 Pretreatment standards for existing sources (PSES).
420.76 Pretreatment Standards for new sources (PSNS).
420.77 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart H—Scale Removal Subcategory

- 420.80 Applicability; description of the scale removal subcategory.
420.81 Specialized definitions.
420.82 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.83 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
420.84 New source performance standards (NSPS).
420.85 Pretreatment standards for existing sources (PSES).
420.86 Pretreatment standards for new sources (PSNS).
420.87 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart I—Acid Pickling Subcategory

- 420.90 Applicability; description of the acid pickling subcategory.
420.91 Specialized definitions.
420.92 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
420.93 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available

technology economically achievable (BAT).

- 420.94 New source performance standards (NSPS).
 420.95 Pretreatment standards for existing sources (PSES).
 420.96 Pretreatment standards for new sources (PSNS).
 420.97 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart J—Cold Forming Subcategory

- 420.100 Applicability; description of the cold forming subcategory.
 420.101 Specialized definitions.
 420.102 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
 420.103 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
 420.104 New source performance standards (NSPS).
 420.105 Pretreatment standards for existing sources (PSES).
 420.106 Pretreatment standards for new sources (PSNS).
 420.107 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart K—Alkaline Cleaning Subcategory

- 420.110 Applicability; description of the alkaline cleaning subcategory.
 420.111 Specialized definitions.
 420.112 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
 420.113 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).
 420.114 New source performance standards (NSPS).
 420.115 Pretreatment standards for existing sources (PSES).
 420.116 Pretreatment standards for new sources (PSNS).
 420.117 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Subpart L—Hot Coating Subcategory

- 420.120 Applicability; description of the hot coating—galvanizing subcategory.
 420.121 Specialized definitions.
 420.122 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).
 420.123 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).

- 420.124 New source performance standards (NSPS).
 420.125 Pretreatment standards for existing sources (PSES).
 420.126 Pretreatment standards for new sources (PSNS).
 420.127 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).

Authority: Sec. 301; 304(b), (c), (e), and (g); 306(b) and (c); 307; 308 and 501, Clean Water Act (the Federal Water Pollution Control Act Amendments of 1972, as amended by the Clean Water Act of 1977) [the "Act"]; 33 USC 1311; 1314(b), (c), (e), and (g); 1316(b) and (c); 1317; 1318; and 1361; 86 Stat. 816, Pub. L. 92-500; 91 Stat. 1567; Pub. L. 95-217.

General Provisions

§ 420.01 Applicability.

The provisions of this part apply to discharges and to the introduction of pollutants into a publicly owned treatment works resulting from production operations in the Iron and Steel Point Source Category.

§ 420.02 General definitions.

In addition to the definitions set forth in 40 CFR Part 401, the following definitions apply to this part:

- (a) The term "TSS" (or total suspended solids, or total suspended residue) means the value obtained by the method specified in 40 CFR § 136.3.
 (b) The term "oil and grease" (or O&G) means the value obtained by the method specified in 40 CFR § 136.3.
 (c) The term "ammonia-N" (or ammonia-nitrogen) means the value obtained by the manual distillation (at pH 9.5) followed by nesslerization method specified in 40 CFR § 136.3.
 (d) The term "cyanide" means total cyanide and is determined by the method specified in 40 CFR § 136.3.
 (e) The term "phenols 4AAP" (or phenolic compounds) means the value obtained by the method specified in 40 CFR § 136.3.
 (f) The term "TRC" (or total residual chlorine) means the value obtained by the iodometric titration with an amperometric endpoint method specified in 40 CFR § 136.3.

(g) The term "fluoride" means the value obtained by the method specified in 40 CFR § 136.3.

(h) The term "cadmium" means total cadmium and is determined by the method specified in 40 CFR § 136.3.

(i) The term "chromium" means total chromium and is determined by the method specified in 40 CFR § 136.3.

(j) The term "hexavalent chromium" (or chromium VI) means the value obtained by the method specified in 40 CFR § 136.3.

(k) The term "copper" means total copper and is determined by the method specified in 40 CFR § 136.3.

(l) The term "iron, dissolved" means the value obtained by the method specified in 40 CFR § 136.3.

(m) The term "lead" means total lead and is determined by the method specified in 40 CFR § 136.3.

(n) The term "nickel" means total nickel and is determined by the method specified in 40 CFR § 136.3.

(o) The term "zinc" means total zinc and is determined by the method specified in 40 CFR § 136.3.

(p) The term "benzene" (or priority pollutant No. 4) means the value obtained by the standard method Number 602 specified in 44 FR 69464, 69570 (December 3, 1979).

(q) The term "benzo (a) pyrene" (or priority pollutant No. 73) means the value obtained by the standard method Number 610 specified in 44 FR 69464, 69570 (December 3, 1979).

(r) The term "naphthalene" (or priority pollutant No. 55) means the value obtained by the standard method Number 610 specified in 44 FR 69464, 69571 (December 3, 1979).

(s) The term "1,1,1-trichloroethane" (or priority pollutant No. 11) means the value obtained by the standard method specified in 44 FR 69464, 69572 (December 3, 1979).

(t) The term "2-nitrophenol" (or priority pollutant No. 57) means the value obtained by the standard method Number 604 specified in 44 FR 69464, 69571 (December 3, 1979).

(u) The term "anthracene" (or priority pollutant No. 76) means the value obtained by the standard method Number 610 specified in 44 FR 69464, 69570 (December 3, 1979).

(v) The term "tetrachloroethylene" (or priority pollutant No. 85) means the value obtained by the standard method Number 601 specified in 44 FR 69464, 69572 (December 3, 1979).

(w) The term "pH" means the value obtained by the standard method specified in 40 CFR § 136.3.

Subpart A—Cokemaking Subcategory

§ 420.10 Applicability; description of the cokemaking subcategory.

The provisions of this subpart are applicable to discharges and introduction of pollutants into publicly owned treatment works resulting from by-product and beehive cokemaking operations.

§ 420.11 Specialized definitions.

(a) The term "beehive cokemaking" means those operations in which coal is heated with the admission of air in

controlled amounts for the purpose of producing coke. There are no by-product recovery operations associated with beehive cokemaking operations.

(b) The term "By-Product" cokemaking means those cokemaking operations in which coal is heated in the absence of air to produce coke. In this process, by-products are recovered from the gases and liquids driven from the coal during cokemaking.

(c) The term "wet desulfurization system" means those systems which remove sulfur compounds from coke oven gases and produce a contaminated process wastewater.

(d) The term "indirect ammonia recovery system" means those systems which recover ammonium hydroxide as a by-product from coke oven gases and waste ammonia liquors.

(e) The term "physical chemical treatment system" means those full scale coke plant wastewater treatment systems incorporating full scale granular activated carbon adsorption units which were in operation prior to the date of proposal of this regulation.

§ 420.12 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) *By-Product cokemaking.*

Subpart A

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	0.2250	0.0750
O&G	.0327	.0109
Ammonia-N	.2736	.0912
Cyanide	.0657	.0219
Phenols (4AAP)	.0045	.0015

pH—Within the range of 6.0 to 9.0.

(1) Increased loadings, not to exceed 15 percent of the above limitations, are allowed for by-product coke plants which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(2) Increased loadings, not to exceed 30 percent of the above limitations, are allowed for by-product coke plants which include indirect ammonia

recovery systems but only to the extent that such systems generate an increased effluent volume.

(b) *Beehive cokemaking.* No discharge of process wastewater pollutants to navigable waters.

§ 420.13 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) *By-Product Cokemaking.*

Subpart A

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Ammonia-N	0.05110	0.00957
Cyanide	.00320	.00160
Phenols (4AAP)	.0000640	.0000160
Benzene	.0000638	.0000319
Naphthalene	.0000128	.0000064
Benzo(a)pyrene	.0000256	.0000128

(1) Increased loadings, not to exceed 16 percent of the above limitations, are allowed for by-product coke plants which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(2) Increased loadings, not to exceed 33 percent of the above limitations, are allowed for by-product coke plants which include indirect ammonia recovery systems but only to the extent such systems generate an increased effluent volume.

(3) The following BAT effluent limitations apply to by-product coke plants with physical chemical treatment systems:

Subpart A

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Ammonia-N	0.05160	0.02580
Phenols (4AAP)	.0000860	.0000215
Benzene	.0000430	.0000215
Naphthalene	.0000086	.0000043
Benzo(a)pyrene	.0000172	.0000086

Increased loadings, not to exceed 25 percent of the above limitations, are allowed for by-product coke plants with physical chemical treatment systems which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(b) *Beehive cokemaking.* No discharge of process wastewater pollutants to navigable waters.

§ 420.14 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

(a) *By-Product cokemaking.*

Subpart A

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	0.34418	0.01280
Oil & grease	.00638	
Ammonia-N	.05110	.00957
Cyanide	.00320	.00160
Phenols (4AAP)	.0000640	.0000160
Benzene	.0000638	.0000319
Naphthalene	.0000128	.0000064
Benzo(a)pyrene	.0000256	.0000128

ph—within the range of 6.0 to 9.0.

(1) Increased loadings, not to exceed 16 percent of the above standards, are allowed for by-product coke plants which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(2) Increased loadings, not to exceed 33 percent of the above standards, are allowed for by-product coke plants which include indirect ammonia recovery systems but only to the extent such systems generate an increased effluent volume.

(b) *Beehive cokemaking.* No discharge of process wastewater pollutants to navigable waters.

§ 420.15 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

(a) By-Product cokemaking.

Subpart A

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Ammonia-N	0.05110	0.00957
Cyanide	.00320	.00160
Phenols (4AAP)	.0000640	.0000160
Benzene	.0000638	.0000319
Naphthalene	.0000128	.0000064
Benzo(a)pyrene	.0000256	.0000128

(1) Increased loadings, not to exceed 16 percent of the above standards, are allowed for by-product coke plants which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(2) Increased loadings, not to exceed 33 percent of the above standards, are allowed for by-product coke plants which include indirect ammonia recovery systems but only to the extent such systems generate an increased effluent volume.

(3) The following pretreatment standards for existing sources apply to by-product coke plants with physical chemical treatment systems:

Subpart A

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Ammonia-N	0.05160	0.02580
Phenols(4AAP)	.0000860	.0000215
Benzene	.0000430	.0000215
Naphthalene	.0000086	.0000043
Benzo(a)pyrene	.0000172	.0000086

Increased loadings, not to exceed 25 percent of the above standards, are allowed for by-product coke plants with physical chemical treatment systems which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(b) Beehive cokemaking. [Reserved]

§ 420.16 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

(a) By-Product cokemaking.

Subpart A

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Ammonia-N	0.05110	0.00957
Cyanide	.00320	.00160
Phenols(4AAP)	.0000640	.0000160
Benzene	.0000638	.0000319
Naphthalene	.0000128	.0000064
Benzo(a)pyrene	.0000256	.0000128

(1) Increased loadings, not to exceed 16 percent of the above standards, are allowed for by-product coke plants which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(2) Increased loadings, not to exceed 33 percent of the above standards, are allowed for by-product coke plants which include indirect ammonia recovery systems but only to the extent such systems generate an increased effluent volume.

(b) Beehive cokemaking. [Reserved]

§ 420.17 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollution control technology.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology:

(a) By-Product cokemaking.

Subpart A

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.03418	0.01280
O&G	.00638	
pH—Within the range of 6.0 to 9.0.		

(1) Increased loadings, not to exceed 16 percent of the above limitations, are allowed for by-product coke plants which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(2) Increased loadings, not to exceed 33 percent of the above limitations, are allowed for by-product coke plants

which include indirect ammonia recovery systems but only to the extent such systems generate an increased effluent volume.

(3) The following BCT effluent limitations apply to by-product coke plants with physical chemical treatment systems:

Subpart A

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.02294	0.00859
O&G	.00430	
pH—Within the range of 6.0 to 9.0.		

Increased loadings, not to exceed 25 percent of the above limitations, are allowed for by-product coke plants with physical chemical treatment systems which have wet desulfurization systems but only to the extent such systems generate an increased effluent volume.

(b) Beehive Cokemaking.

No discharge of process wastewater pollutant to navigable waters.

Subpart B—Sintering Subcategory

§ 420.20 Applicability; description of the sintering subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from sintering operations conducted by the heating of iron bearing wastes (mill scale and dust from blast furnaces and steelmaking furnaces) together with fine iron ore, limestone, and coke fines in an ignition furnace and traveling grate to produce an agglomerate for charging to the blast furnace.

§ 420.21 Specialized definitions [Reserved]

§ 420.22 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Subpart B

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0624	0.0208
O&G	.0126	.0042

pH—Within the range of 6.0 to 9.0.

§ 420.23 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 124.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Subpart B

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Ammonia-N	0.0006260	0.0003130
Cyanide	.0001564	.0000782
Phenols(4AAP)	.0000626	.0000313
TRC	.0001560	
Lead	.0000626	.0000313
Zinc	.0000626	.0000313

§ 402.24 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

Subpart B

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01252	0.00469
O&G	.00313	
Ammonia-N	.0006260	.0003130
Cyanide	.0001564	.0000782
Phenols(4AAP)	.0000626	.0000313
TRC	.0001560	
Lead	.0000626	.0000313
Zinc	.0000626	.0000313

pH—Within the range of 6.0 to 9.0.

§ 420.25 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

Subpart B

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Ammonia-N	0.0006260	0.0003130
Cyanide	.0001564	.0000782
Phenols(4AAP)	.0000626	.0000313
TRC	.0001560	
Lead	.0000626	.0000313
Zinc	.0000626	.0000313

§ 420.26 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

Subpart B

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Ammonia-N	0.0006260	0.0003130
Cyanide	.0001564	.0000782
Phenols (4AAP)	.0000626	.0000313
TRC	.0001560	
Lead	.0000626	.0000313
Zinc	.0000626	.0000313

§ 420.27 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Subpart B

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01252	0.00469
O&G	.00313	

pH—Within the range of 6.0 to 9.0.

Subpart C—Ironmaking Subcategory

§ 420.30 Applicability; description of the ironmaking subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from ironmaking operations in which iron ore is reduced to molten iron in a blast furnace.

§ 420.31 Specialized definitions.

(a) The term "ferromanganese blast furnace" means those blast furnaces which produce molten iron containing more than fifty percent manganese.

(b) The term "iron blast furnace" means all blast furnaces except ferromanganese blast furnaces.

§ 420.32 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) *Iron Blast Furnace.*

Subpart C

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0780	0.0260
Ammonia-N	.1805	.0535
Cyanide	.0234	.0078
Phenols (4AAP)	.0063	.0021

pH—Within the range of 6.0 to 9.0.

Ferromanganese Blast Furnace.

Subpart C

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.3129	0.1043
Ammonia-N	1.2961	.4287
Cyanide	.4689	.1563
Phenols (4AAP)	.0624	.0206
pH—Within the range of 6.0 to 9.0.		

§ 420.33 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) *Iron Blast Furnace.*

Subpart C

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Ammonia-N	0.000584	0.000292
Cyanide	.000584	.000292
Phenols (4AAP)	.000584	.000292
TRC	.000146	
Lead	.0002190	.0000730
Zinc	.0002628	.0000676

(b) *Ferromanganese Blast Furnace.*
[Reserved]

§ 420.34 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

(a) *Iron Blast Furnace.*

Subpart C

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01169	0.00438
O&G	.00292	
Ammonia-N	.000584	.000292
Cyanide	.000584	.000292
Phenols (4AAP)	.000584	.000292
TRC	.000146	

Subpart C—Continued

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
Lead	.0002190	.0000730
Zinc	.0002628	.0000676
pH—Within the range of 6.0 to 9.0.		

(b) *Ferromanganese Blast Furnace.*
[Reserved]

§ 420.35 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

(a) *Iron Blast Furnace.*

Subpart C

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Ammonia-N	0.000584	0.000292
Cyanide	.000584	.000292
Phenols (4AAP)	.000584	.000292
TRC	.000146	
Lead	.0002190	.0000730
Zinc	.0002628	.0000676

(b) *Ferromanganese Blast Furnace.*
[Reserved]

§ 420.36 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

(a) *Iron Blast Furnace.*

Subpart C

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Ammonia-N	0.000584	0.000292
Cyanide	.000584	.000292
Phenols (4AAP)	.000584	.000292
TRC	.000146	

Subpart C—Continued

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
Lead	.0002190	.0000730
Zinc	.0002628	.0000676

(b) *Ferromanganese Blast Furnace.*
[Reserved]

§ 420.37 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available conventional control technology.

(a) *Iron Blast Furnace.*

Subpart C

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	0.01169	0.00438
O&G	.00292	
pH—Within the range of 6.0 to 9.0.		

(b) *Ferromanganese Blast Furnace.*
[Reserved]

Subpart D—Steelmaking Subcategory

§ 420.40 Applicability; description of the steelmaking subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from steelmaking operations conducted in basic oxygen, open hearth, and electric arc furnaces.

§ 420.41 Specialized definitions.

(a) The term "basic oxygen furnace steelmaking" means the production of steel from molten iron, steel scrap, fluxes, and various combinations thereof, in refractory lined furnaces by adding oxygen.

(b) The term "open hearth furnace steelmaking" means the production of steel from molten iron, steel scrap, fluxes, and various combinations thereof, in refractory lined fuel-fired furnaces equipped with regenerative chambers to recover heat from the flue and combustion gases.

(c) The term "electric arc furnace steelmaking" means the production of steel principally from steel scrap and fluxes in refractory lined furnaces by passing an electric current through the scrap or steel bath.

(d) The term "wet" means those steelmaking air cleaning systems that primarily use water for furnace gas cleaning.

(e) The term "semi-wet" means those steelmaking air cleaning systems that use water to condition the temperature and humidity of furnace gases such that the gases may be cleaned in dry air pollution control systems.

(f) The term "open combustion" means those basic oxygen furnace steelmaking wet air cleaning systems which are designed to allow excess air to enter the air pollution control system for the purpose of combusting the carbon monoxide in furnace gases.

(g) The term "suppressed combustion" means those basic oxygen furnace steelmaking wet air cleaning systems which designed to limit or suppress the combustion of carbon monoxide in furnace gases by restricting the amount of excess air entering the air pollution control system.

§ 420.42 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) *Basic oxygen furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet-suppressed combustion.*

Subpart D

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0312	0.0104
pH—Within the range of 6.0 to 9.0.		

(3) *Wet-open combustion.*

Subpart D

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0312	0.0104
pH—Within the range of 6.0 to 9.0.		

(b) *Open hearth furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0687	0.0229
pH—Within the range of 6.0 to 9.0.		

(c) *Electric arc furnace steelmaking.*—(1) *Semi-wet.*

No discharge of process wastewater pollutants to navigable waters.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0312	0.0104
pH—Within the range of 6.0 to 9.0.		

§ 420.43 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) *Basic oxygen furnace steelmaking.*—

(1) *Semi-wet.*—No discharge of process wastewater pollutants to navigable waters.

(2) *Wet-suppressed combustion.*

Subpart D

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000624	0.0000208
Lead	.000188	.0000626
Zinc	.000188	.0000626

(3) *Wet-open combustion*

Subpart D

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002034	0.0000678
Lead	.0002034	.0000678
Zinc	.0002439	.0000813

(b) *Open hearth furnace steelmaking.*—(1) *Semi-wet.*

(b) *Open hearth furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one-day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001377	0.0000459
Lead	.0002064	.0000688
Zinc	.000414	.000138

(c) *Electric arc furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one-day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000939	0.0000313
Lead	.0001878	.0000626
Zinc	.0002190	.0000730

§ 420.44 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

(a) *Basic oxygen furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet-suppressed combustion.*

Subpart D

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.008357	0.003130
Chromium	.000624	.000208
Lead	.000188	.000626
Zinc	.000188	.000626

pH—Within the range of 6.0 to 9.0.

(3) *Wet-open combustion.*

Subpart D

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01087	0.00407
Chromium	.0002034	.000678
Lead	.0002034	.000678
Zinc	.0002439	.000613

pH—Within the range of 9.0 to 9.0.

(b) *Open hearth furnace steelmaking.*—(1) *Semi-wet.* [Reserved]

(2) *Wet.* [Reserved]

(c) *Electric arc furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.008357	0.003130
Chromium	.000939	.000313
Lead	.001878	.000626
Zinc	.0002190	.000730

pH—Within the range of 6.0 to 9.0.

§ 420.45 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

(a) *Basic oxygen furnace steelmaking.* (1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet-suppressed combustion.*

Subpart D

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000624	0.000208
Lead	.000188	.000626
Zinc	.000188	.000626

(3) *Wet-open combustion.*

Subpart D

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002034	0.000678
Lead	.0002034	.000678
Zinc	.0002439	.000613

(b) *Open hearth furnace steelmaking.*

(1) *Semi-wet.* No discharge of process wastewater pollutants to publicly owned treatment works.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001377	0.000459
Lead	.0002064	.000688
Zinc	.000414	.00138

(c) *Electric arc furnace steelmaking.*—(1) *Semi-wet.* No discharge of process

wastewater pollutants to publicly owned treatment works.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000939	0.000313
Lead	.001878	.000626
Zinc	.0002190	.000730

§ 420.46 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

(a) *Basic oxygen furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to publicly owned treatment works.

(2) *Wet-suppressed combustion.*

Subpart D

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000624	0.000208
Lead	.000188	.000626
Zinc	.000188	.000626

(3) *Wet-open combustion.*

Subpart D

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002034	0.000678
Lead	.0002034	.000678
Zinc	.0002439	.000613

(b) *Open hearth furnace steelmaking.*—(1) *Semi-wet.* [Reserved]

(2) *Wet.* [Reserved]

(c) *Electric arc furnace steelmaking.*—(1) *Semi-wet.* No discharge of process

wastewater pollutants to publicly owned treatment works.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000939	0.0000313
Lead	.0001878	.0000626
Zinc	.0002190	.0000730

§420.47 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

(a) *Basic oxygen furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet-suppressed combustion.*

Subpart D

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.006357	0.00313
pH—Within the range of 6.0 to 9.0.		

(3) *Wet-open combustion.*

Subpart D

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01087	0.00407
pH—Within the range of 6.0 to 9.0.		

(b) *Open hearth furnace steelmaking.*—(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01837	0.00688
pH—Within the range of 6.0 to 9.0.		

(c) *Electric arc furnace steelmaking.*
(1) *Semi-wet.* No discharge of process wastewater pollutants to navigable waters.

(2) *Wet.*

Subpart D

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0312	0.0104
pH—Within the range of 6.0 to 9.0.		

Subpart E—Vacuum Degassing Subcategory

§ 420.50 Applicability; description of the vacuum degassing subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from vacuum degassing operations conducted by applying a vacuum to molten steel.

§ 420.51 Specialized definitions
(Reserved)

§ 420.52 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Subpart E

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01563	0.00521
pH—Within the range of 6.0 to 9.0.		

§ 420.53 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Subpart E

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000312	0.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104

§ 420.54 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the values set forth below.

Subpart E

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of Daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.00417	0.00158
Chromium	0.000312	0.000104
Lead	0.000312	0.000104
Zinc	0.000312	0.000104
pH—Within the range of 6.0 to 9.0.		

§ 420.55 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

Subpart E

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000312	0.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104

§ 420.56 Pretreatment standards for new sources.

Any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

Subpart E

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000312	0.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104

§ 420.57 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Subpart E

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01563	0.00521

pH—Within the range of 6.0 to 9.0.

Subpart F—Continuous Casting Subcategory

§ 420.60 Applicability; description of the continuous casting subcategory.

The provisions of this subpart are

applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from the continuous casting of molten steel into intermediate or semi-finished steel products through water cooled molds.

§ 420.61 Specialized definitions. (Reserved)

§ 420.62 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Subpart F

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.9780	0.0260
Oil and Grease	.0294	.0078

pH—Within the range of 6.0 to 9.0.

§ 420.63 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Subpart F

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000312	0.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104

§ 420.64 New source performance standards.

The discharge of wastewater

pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

Subpart F

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TTS	0.00417	0.00156
O&G	.00104	.00104
Chromium	.0000312	.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104

pH—Within the range of 6.0 to 9.0.

§ 420.65 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

Subpart F

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000312	0.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104

§ 420.66 Pretreatment standards for new sources.

Any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

Subpart F

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000312	0.0000104
Lead	.0000312	.0000104

Subpart F—Continued

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
Zinc	.0000312	.0000104

§ 420.67 Effluent limitations representing the degree of effluent reduction achievable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Subpart F

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.00417	0.00156
Oil & Grease	.00104	
pH—Within the range of 6.0 to 9.0.		

Subpart G—Hot Forming Subcategory

§ 420.70 Applicability; description of the hot forming subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from hot forming operations conducted in primary, section, flat, and pipe and tube mills.

§ 420.71 Specialized definitions.

(a) The term "hot forming" means those steel operations in which solidified, heated steel is shaped by rolls.

(b) The term "primary mill" means those steel hot forming operations that reduce ingots to blooms or slabs by passing the ingots between rotating steel rolls. The "primary mill" performs the first steel hot forming operation on solidified steel after its is removed from the ingot molds.

(c) The term "section mill" means those steel hot forming operations that produce a variety of finished and semi-finished steel products other than the

products of those mills specified below in subsections (d), (e), (f), (g) and (h).

(d) The term "flat mill" means those steel hot forming operations that reduce heated slabs to plates, strip and sheet, or skelp.

(e) The term "pipe and tube mill" means those steel hot forming operations that produce butt welded or seamless tubular steel products.

(f) The term "scarfing" means those steel surface conditioning operations in which flames generated by oxygen and fuel are used to remove surface metal imperfections from slabs, billets, or blooms.

(g) The term "plate mill" means those steel hot forming operations that produce flat hot-rolled products which are (1) between 8 and 48 inches wide and over 0.23 inches thick; or (2) greater than 48 inches wide and over 0.18 inches thick.

(h) The term "hot strip and sheet mill" means those steel hot forming operations that produce flat hot-rolled products other than plates.

(i) The term "specialty steel" means those steel products which contain: (1) any of the following elements at levels above the specified percentages, by weight: manganese, 1.65 percent; silicon, 0.60 percent; or copper, 0.60 percent; or

(2) any of the following elements when added to enhance the properties of the steel product: aluminum, chromium, cobalt, columbium, molybdenum, nickel, titanium, tungsten, vanadium or zirconium.

(j) The term "carbon steel" means those steel products other than specialty steel products.

(k) The term "carbon hot forming operation" (or "carbon") means those hot forming operations which produce a majority, on a tonnage basis, of carbon steel products.

(1) The term "specialty hot forming operations" (or "specialty") applies to all hot forming operations other than "carbon hot forming operations."

§ 420.72 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application

of the best particulate control technology currently available.

(a) *Primary mills.* (1) *Carbon, without scarfing.*

Subpart G

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	0.1113	0.0371
O&G	.0664	.0288
pH—Within the range of 6.0 to 9.0.		

(2) *Carbon with scarfing.*

Subpart G

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	0.1359	0.0453
O&G	.1056	.0352
pH—Within the range of 6.0 to 9.0.		

(3) *Specialty.*

Subpart G

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1962	0.0654
O&G	.1524	.0508
pH—Within the range of 6.0 to 9.0.		

(b) *Section mills.*

Subpart G

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0726	0.242
O&G	.330	.110
pH—Within the range of 6.0 to 9.0.		

(c) *Flat mills.*

(1) *Hot strip and sheet mills.*

Subpart G**(a) Primary mills.
(1) Without scarfing.**

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
TSS	0.993	0.331
O&G	.522	.174
pH—Within the range of 6.0 to 9.0.		

Subpart G

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.0001125	0.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375

(2) With scarfing.**Subpart G**

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.0001752	0.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584

**(b) Section mills.
(1) Carbon****Subpart G**

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.0002502	0.0000834
Lead	.0002502	.0000834
Zinc	.0002502	.0000834

(2) Specialty**Subpart G**

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.0001626	0.0000542
Lead	.0001626	.0000542
Zinc	.0001626	.0000542

**(c) Flat mills.
(1) Hot strip and sheet mills****Subpart G**

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.000324	0.000108
Lead	.000324	.000108
Zinc	.000324	.000108

(2) Carbon plate mills**Subpart G**

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.0001752	0.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584

(3) Specialty plate mills**Subpart G**

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.0000750	0.0000250
Lead	.0000750	.0000250
Zinc	.0000750	.0000250

(d) Pipe and tube mills**Subpart G**

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
Chromium	0.0002751	0.0000917
Lead	.0002751	.0000917
Zinc	.0002751	.0000917

§ 420.74 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

**(a) Primary mills
(1) Without scarfing****Subpart G**

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
TSS	0.993	0.331
O&G	.522	.174
pH—Within the range of 6.0 to 9.0.		

(2) Carbon plate mills.**Subpart G**

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
TSS	0.501	0.167
O&G	.501	.167
pH—Within the range of 6.0 to 9.0.		

(3) Specialty plate mills.**Subpart G**

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
TSS	1.128	0.376
O&G	1.128	.376
pH—Within the range of 6.0 to 9.0.		

(d) Pipe and tube mills.**Subpart G**

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kkg (lb/1,000 lb) of product	
TSS	0.426	0.142
O&G	.126	.042
pH—Within the range of 6.0 to 9.0.		

§ 420.73 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01503	0.00563
O&G	.00373	
Chromium	.0001125	.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375
pH—Within the range of 6.0 to 9.0.		

(2) With scarfing

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.02339	0.00876
O&G	.00584	
Chromium	.0001752	.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584
pH—Within the range of 6.0 to 9.0.		

(b) Section mills.

(1) Carbon

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.03338	0.01250
O&G	.00634	
Chromium	.0002502	.0000834
Lead	.0002502	.0000834
Zinc	.0002502	.0000834
pH—Within the range of 6.0 to 9.0.		

(2) Specialty

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.02171	0.00813
O&G	.00542	
Chromium	.0001626	.0000542
Lead	.0001626	.0000542
Zinc	.0001626	.0000542
pH—Within the range of 6.0 to 9.0.		

(c) Flat mills.
(1) Hot strip and sheet mills

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.04352	0.01630
O&G	.01090	
Chromium	.000324	.000108
Lead	.000324	.000108
Zinc	.000324	.000108
pH—Within the range of 6.0 to 9.0.		

(2) Carbon plate mills

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.02339	0.00876
O&G	.00584	
Chromium	.0001752	.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584
pH—Within the range of 6.0 to 9.0.		

(3) Specialty plate mills

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01001	0.00375
O&G	.00250	
Chromium	.0000750	.0000250
Lead	.0000750	.0000250
Zinc	.0000750	.0000250
pH—Within the range of 6.0 to 9.0.		

(d) Pipe and tube mills.

Subpart G

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.03685	0.01380
O&G	.00917	
Chromium	.0002751	.0000917

Subpart G—Continued

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Lead	.0002751	.0000917
Zinc	.0002751	.0000917
pH—Within the range of 6.0 to 9.0.		

§ 420.75 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

(a) *Primary mills.*
(1) Without scarfing

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001125	0.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375

(2) With scarfing

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001752	0.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584

(b) *Section mills.*

(1) Carbon

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002502	0.0000834
Lead	.0002502	.0000834
Zinc	.0002502	.0000834

(2) Specialty

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001626	0.0000542
Lead	.0001626	.0000542
Zinc	.0001626	.0000542

(c) Flat mills.

(1) Hot strip and sheet mills.

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000324	0.000108
Lead	.000324	.000108
Zinc	.000324	.000108

(2) Carbon plate mills.

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001752	0.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584

(3) Specialty plate mills.

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000750	0.0000250
Lead	.0000750	.0000250
Zinc	.0000750	.0000250

(d) Pipe and tube mills.

Subpart G

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002751	0.0000917
Lead	.0002751	.0000917
Zinc	.0002751	.0000917

§ 420.76 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

(a) Primary mills.

(1) Without scarfing.

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001125	0.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375

(2) With scarfing

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001752	0.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584

(b) Section mills.

(1) Carbon

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002502	0.0000834
Lead	.0002502	.0000834

Subpart G—Continued

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
Zinc	.0002502	.0000834

(2) Specialty

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001626	0.0000542
Lead	.0001626	.0000542
Zinc	.0001626	.0000542

(c) Flat mills.

(1) Hot strip and sheet mills

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000324	0.000108
Lead	.000324	.000108
Zinc	.000324	.000108

(2) Carbon plate mills

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001752	0.0000584
Lead	.0001752	.0000584
Zinc	.0001752	.0000584

(3) Specialty plate mills

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000750	0.0000250

Subpart G—Continued

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
Lead	.0000750	.0000250
Zinc	.0000750	.0000250

(d) Pipe and tube mills.

Subpart G

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
Chromium	0.0002751	0.0000917
Lead	.0002751	.0000917
Zinc	.0002751	.0000917

§ 420.77 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

(a) Primary mills.

(1) Without scarfing

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.01503	0.00563
O&G	.00373	
pH—Within the range of 6.0 to 9.0.		

(2) With scarfing

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.02339	0.00876
O&G	.00584	
pH—Within the range of 6.0 to 9.0.		

(b) Section mills.

(1) Carbon

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.03338	0.01250
O&G	.00834	
pH—Within the range of 6.0 to 9.0.		

(2) Specialty

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.02171	0.00613
O&G	.00542	
pH—Within the range of 6.0 to 9.0.		

(c) Flat mills.

(1) Hot strip and sheet mills.

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.04352	0.01630
O&G	.01090	
pH—Within the range of 6.0 to 9.0.		

(2) Carbon plate mills.

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.02339	0.00876
O&G	.00584	
pH—Within the range of 6.0 to 9.0.		

(3) Specialty plate mills.

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.01001	0.00375
O&G	.00250	
pH—Within the range of 6.0 to 9.0.		

(d) Pipe and tube mills.

Subpart G

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
		Kg/kg (lb/1,000 lb) of product
TSS	0.03685	0.01390
O&G	.00917	
pH—Within the range of 6.0 to 9.0.		

Subpart H—Scale Removal Subcategory

§ 420.80 Applicability; description of the scale removal subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from kolene and hydride scale removal operations.

§ 420.81 Specialized definitions.

(a) The term "kolene scale removal" means the removal of scale from semi-finished steel products by the action of molten salts baths other than those containing sodium hydride.

(b) The term "hydride scale removal" means the removal of scale from semi-finished steel products by the action of molten salt baths containing sodium hydride.

§ 420.82 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) Kolene Scale Removal.

Subpart H

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1563	0.0521
Chromium	.0030	.0010
Chromium (hexavalent)	.00030	.00010
Iron (dissolved)	.0063	.0021
pH—Within the range of 6.0 to 9.0.		

(b) Hydride Scale Removal.

Subpart H

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.375	0.125
Cyanide	.00375	.00125
Chromium	.00750	.00250
Chromium (hexavalent)	.00090	.00030
Iron (dissolved)	.0150	.0050
pH—Within the range of 6.0 to 9.0.		

§ 420.83 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR § 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) Kolene Scale Removal.

Subpart H

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000390	0.000130

(b) Hydride Scale Removal.

Subpart H

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cyanide	0.000912	0.000104
Chromium	.000126	.000042

Subpart H—Continued

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
Lead	.000126	.000042

§ 420.84 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

(a) Kolene Scale Removal.

Subpart H

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.03471	0.0130
Chromium	.000252	.000084
pH—Within the range of 6.0 to 9.0.		

(b) Hydride Scale Removal.

Subpart H

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.008277	0.00310
Cyanide	.000156	.000052
Chromium	.000063	.000021
Lead	.000063	.000021
pH—Within the range of 6.0 to 9.0.		

§ 420.85 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

(a) Kolene Scale Removal.

Subpart H

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Chromium	0.000390	0.000130

(b) Hydride Scale Removal.

Subpart H

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Cyanide	0.000312	0.000104
Chromium	.000126	.000042
Lead	.000126	.000042

§ 420.86 Pretreatment standards for new sources.

Except as provided in 40 CFR 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

(a) Kolene Scale Removal.

Subpart H

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of Product	
Chromium	0.000252	0.000084

(b) Hydride Scale Removal.

Subpart H

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of Product	
Cyanide	0.000156	0.000052
Chromium	.000063	.000021
Lead	.000063	.000021

§ 420.87 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30-32 any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

(a) *Kolene Scale Removal.*

Subpart H

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of Product	
TSS	0.1563	0.0521
pH—Within the range of 6.0 to 9.0.		

(b) *Hydride Scale Removal.*

Subpart H

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of Product	
TSS	0.01655	0.00620
pH—Within the range of 6.0 to 9.0.		

Subpart I—Acid Pickling Subcategory

§ 420.90 Applicability; description of the acid pickling subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from sulfuric acid, hydrochloric acid, or combination acid pickling operations.

§ 420.91 Specialized definitions.

(a) The term "sulfuric acid pickling" means those operations in which steel products are immersed in sulfuric acid solutions to chemically remove scale and oxides and those rinsing steps associated with such immersion.

(b) The term "hydrochloric acid pickling" means those operations in which steel products are immersed in hydrochloric acid solutions to chemically remove oxides and scale, and those rinsing operations associated with such immersion.

(c) The term "combination acid pickling" means those operations in which steel products are immersed in solutions of more than one acid to chemically remove oxides and scale, and those rinsing operations associated with such immersion.

(d) The term "fume scrubber" means those pollution control devices used to remove and clean fumes originating in pickling operation.

(e) The term "batch" means those pickling operations which process steel products such as coiled wire, rods, and tubes in discrete batches or bundles.

(f) The term "continuous" means those pickling operations which process steel products other than in discrete batches or bundles.

(g) The term "acid recovery" means those sulfuric acid pickling operations that include processes for recovering the unreacted acid from spent pickling acid solutions.

(h) The term "acid regeneration" means those hydrochloric acid pickling operations that include processes for regenerating acid from spent pickling acid solutions.

(i) The term "neutralization" means those acid pickling operations that do not include acid recovery or acid regeneration processes.

(j) The term "spent acid solution" (or spent pickle liquor) means those solutions of steel pickling acids which have been used in the pickling process and are discharged or removed therefrom.

§ 420.92 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) *Sulfuric acid pickling.* (1) Batch neutralization.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.2252	0.07506
O&G*	0.4503	0.1501
Iron (dissolved)	0.0450	0.0150
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(2) Batch; acid recovery.

No discharge of process wastewater pollutants to navigable waters.

(3) Continuous neutralization without spent acid solutions.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1407	0.0469
O&G*	0.281	0.0938
Iron (dissolved)	0.0281	0.00938
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(4) Continuous neutralization with spent acid solutions.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1563	0.0521
O&G*	0.312	0.104
Iron (dissolved)	0.0312	0.0104
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(5) Continuous acid recovery. No discharge of process wastewater pollutants to navigable waters.

(b) *Hydrochloric acid pickling.* (1) Batch neutralization without fume scrubbers.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1440	0.0480
O&G*	0.2880	0.0960
Iron (dissolved)	0.02880	0.00960
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(2) Batch neutralization with fume scrubbers.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1752	0.0584
O&G*	.0351	.0117
Iron (dissolved)	.00351	.0117
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(3) Continuous neutralization without fume scrubbers

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1440	0.0480
O&G*	.02880	.00960
Iron (dissolved)	.002880	.00960
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(4) Continuous neutralization with fume scrubbers.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1752	0.0584
O&G*	.0351	.0117
Iron (dissolved)	.00351	.0117
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(5) Continuous acid regeneration without fume scrubbers.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.2902	0.0834
O&G*	.0496	.0166
Iron (dissolved)	.00496	.0166
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(6) Continuous acid regeneration with fume scrubbers.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.2814	0.0938
O&G*	.0561	.0187
Iron (dissolved)	.00561	.0187
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(c) Combination acid pickling. (1) Batch pipe and tube products.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.2190	0.0730
O&G*	.0676	.0292
Chromium	.00483	.00146
Iron (dissolved)	.00876	.00292
Nickel	.00219	.000730
Fluoride**	.1314	.0438
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

**The limitations for fluoride apply only when hydrofluoric acid pickling solutions are used.

(2) Batch—other products.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0627	0.0209
O&G*	.0249	.00830
Chromium	.00125	.000417
Iron (dissolved)	.00249	.000830
Nickel	.000627	.000209
Fluoride**	.0375	.0125
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

**The limitations for fluoride apply only when hydrofluoric acid pickling solutions are used.

(3) Continuous.

Subpart I

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.3120	0.104
O&G*	.1251	.0417
Chromium	.00627	.00209
Iron (dissolved)	.01251	.00417
Nickel	.003120	.00104
Fluoride**	.1878	.0626
pH—Within the range of 6.0 to 9.0.		

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

**The limitations for fluoride apply only when hydrofluoric acid pickling solutions are used.

§ 420.93 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) Sulfuric acid pickling. (1) Batch neutralization.

Subpart I

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000876	0.0000292
Lead	.0000876	.0000292
Zinc	.0000876	.0000292

(2) Batch acid recovery. No discharge of process wastewater pollutants to navigable waters.
(3) Continuous neutralization.

Subpart I

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000890	0.0000290
Lead	.0000890	.0000290
Zinc	.0000890	.0000290

(4) Continuous acid recovery. No discharge of process wastewater pollutants to navigable waters.
(b) Hydrochloric acid pickling.

(1) Batch neutralization.

Subpart I

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001125	0.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375

(2) Continuous neutralization.

Subpart I

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000687	0.0000229
Lead	.0000687	.0000229
Zinc	.0000687	.0000229

(3) Continuous acid regeneration.

Subpart I

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000676	0.0000292
Lead	.0000676	.0000292
Zinc	.0000676	.0000292

(c) Combination acid pickling.

(1) Batch.

Subpart I

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001314	0.0000438
Copper	.0001314	.0000438
Nickel	.0001971	.0000676
Fluoride ¹	.01971	.00657

¹ The limitations for fluoride apply only when hydrofluoric acid pickling solutions are used.

(2) Continuous.

Subpart I

Pollutant or pollutant property	BAT Effluent limitation	
	Maximum for any one day	Average of daily values for 30 consecutive days.
	Kg/kg (lb/1,000 lb) of products	
Chromium	0.000432	0.000144
Copper	.000432	.000144
Nickel	.000648	.000288
Fluoride*	.0648	.0216

*The limitations for fluoride apply only when hydrofluoric acid pickling solutions are used.

§ 420.94 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

(a) *Sulfuric acid pickling.* No discharge of process wastewater pollutants to navigable waters.

(b) *Hydrochloric acid pickling.*

(1) Batch neutralization

Subpart I

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days.
	Kg/kg (lb/1,000 lb) of products	
TSS	0.02260	0.01130
O&G*	.00750	.00375
Chromium	.0001125	.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(2) Continuous neutralization

Subpart I

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days.
	Kg/kg (lb/1,000 lb) of products	
TSS	0.01376	0.00688
O&G*	.00458	.00229
Chromium	.0000678	.0000229
Lead	.0000678	.0000229
Zinc	.0000678	.0000229

ph—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(3) Continuous acid regeneration

Subpart I

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days.
	Kg/kg (lb/1,000 lb) of products	
TSS	0.01752	0.00876
O&G*	.00584	.00292
Chromium	.0000876	.0000292
Lead	.0000876	.0000292
Zinc	.0000876	.0000292

ph—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(c) Combination acid pickling.

(1) Batch

Subpart I

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01126	0.00563
O&G*	.00376	.00188
Chromium	.0000564	.0000188
Copper	.0000564	.0000188
Nickel	.0000644	.0000375
Fluoride**	.00644	.00281

ph—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

**The limitations for fluoride apply only when hydrofluoric acid pickling solutions are used.

(2) Continuous

Subpart I

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.02260	0.01130
O&G*	.00750	.00375
Chromium	.0001125	.0000375
Copper	.0001125	.0000375
Nickel	.0001690	.0000751
Fluoride**	.0169	.00563

ph—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

**The limitations for fluoride apply only when hydrofluoric acid pickling solutions are used.

§ 420.95 Pretreatment standards for existing sources.

Except as provided in 40 FR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

(a) Sulfuric acid recovery.**(1) Batch neutralization****Subpart I**

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000876	0.0000292
Lead	.0000876	.0000292
Zinc	.0000876	.0000292

(2) *Batch acid recovery.* No discharge of process wastewater pollutants to publicly owned treatment works.

(3) Continuous neutralization**Subpart I**

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000688	0.0000230
Lead	.0000688	.0000230
Zinc	.0000688	.0000230

(4) Continuous acid recovery.

No discharge of process wastewater pollutants to publicly owned treatment works.

(b) Hydrochloric acid pickling.**(1) Batch neutralization****Subpart I**

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001125	0.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375

(2) Continuous neutralization**Subpart I**

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000687	0.0000229
Lead	.0000687	.0000229
Zinc	.0000687	.0000229

(3) Continuous acid regeneration**Subpart I**

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000876	0.0000292
Lead	.0000876	.0000292
Zinc	.0000876	.0000292

(c) Combination acid pickling.**(1) Batch****Subpart I**

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001314	0.0000438
Copper	.0001314	.0000438
Nickel	.0001971	.0000876

(2) Continuous**Subpart I**

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000432	0.0000144
Copper	.0000432	.0000144
Nickel	.0000648	.0000288

§ 420.96 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and

achieve the following pretreatment standards for new sources.

(a) *Sulfuric acid pickling.* No discharge of process wastewater pollutants to publicly owned treatment works.

(b) Hydrochloric acid pickling.**(1) Batch neutralization****Subpart I**

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Chromium	0.0001125	0.0000375
Lead	.0001125	.0000375
Zinc	.0001125	.0000375

(2) Continuous neutralization**Subpart I**

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Chromium	0.0000687	0.0000229
Lead	.0000687	.0000229
Zinc	.0000687	.0000229

(3) Continuous acid regeneration**Subpart I**

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
Chromium	0.0000876	0.0000292
Lead	.0000876	.0000292
Zinc	.0000876	.0000292

(c) Combination acid pickling.**(1) Batch****Subpart I**

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000563	0.0000188
Copper	.0000563	.0000188
Nickel	.0000844	.0000375

(2) Continuous

Subpart I

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001125	0.0000375
Copper	.0001125	.0000375
Nickel	.0001690	.0000751

§ 420.97 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

(a) Sulfuric acid pickling.

(1) Batch neutralization

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.2252	0.07506
O&G*	.04503	.01501

* The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(2) Batch acid recovery. No discharge of process wastewater pollutants to navigable waters.

(3) Continuous neutralization without spent acid solutions

Subpart I

Pollutant or pollutant property	BCT Effluent Limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1407	0.0469
O&G*	.02814	.00938

* The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(4) Continuous neutralization with spent acid solutions

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1563	0.0521
O&G*	0.0312	0.0104

* The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(5) Continuous acid recovery. No discharge of process wastewater pollutants to navigable waters.

(b) Hydrochloric acid pickling.

(1) Batch neutralization without fume scrubbers.

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1440	0.0480
O&G*	.0288	.00960

* The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(2) Batch neutralization with fume scrubbers.

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1752	0.0584
O&G*	.0351	.0117

* The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(3) Continuous neutralization.

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.00918	0.00344
O&G*	.00229	.00074

pH—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(4) Continuous acid regeneration.

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.01169	0.00438
O&G*	.00292	.00097

pH—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(c) Combination acid pickling.

(1) Batch pipe and tube products.

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.2190	0.0730
O&G*	.0876	.0292

pH—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(2) Batch—other products.

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0627	0.0209
O&G*	.0249	.0083

pH—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

(3) Continuous.

Subpart I

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.3120	0.1040
O&G*	.1251	.0417

pH—Within the range of 6.0 to 9.0.

*The limitations for oil and grease apply only when acid pickling wastewaters are treated with cold rolling wastewaters.

Subpart J—Continued

Subpart J—Cold Forming Subcategory

§ 420.100 Applicability; description of the cold forming subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works from cold rolling and cold working pipe and tube operations in which unheated steel is passed through rolls or otherwise processed to reduce its thickness, to produce a smooth surface, or to develop controlled mechanical properties in the steel.

§ 420.101 Specialized definitions.

(a) The term "recirculation mill" means those cold rolling operations which include recirculation of rolling solutions at all mill stands.

(b) The term "combination mill" means those cold rolling operations which include recirculation of rolling solutions at one or more mill stands, and once-through use of rolling solutions at the remaining stand or stands.

(c) The term "direct application mill" means those cold rolling operations which include once-through use of rolling solutions at all mill stands.

(d) The term "cold worked pipe and tube mill" means those cold forming operations that process unheated pipe and tube products using either water or oil solutions for cooling and lubrication.

§ 420.101 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) *Cold rolling mills.* (1) Recirculation mills.

Subpart J

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.00783	0.00261
O&G	.00312	.00104

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
Iron (dissolved)*	.000312	.000104
pH—Within the range of 6.0 to 9.0.		

*The limitations for dissolved iron apply only when cold rolling wastewaters are treated with acid pickling rinse wastewaters.

(2) Combination mills.

Subpart J

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1251	0.0417
O&G	.0501	.0167
Iron (dissolved)*	.00501	.00167
pH—Within the range of 6.0 to 9.0.		

*The limitations for dissolved iron apply only when cold rolling wastewaters are treated with acid pickling rinse wastewaters.

(3) Direct application mills.

Subpart J

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.3120	0.1040
O&G	.1251	.0417
Iron (dissolved)*	.01251	.00417
pH—Within the range of 6.0 to 9.0.		

*The limitations for dissolved iron apply only when cold rolling wastewaters are treated with acid pickling rinse wastewaters.

(b) *Cold worked pipe and tube mills.*

(1) Using water. No discharge of process wastewater pollutants to navigable waters.

(2) Using oil solutions. No discharge of process wastewater pollutants to navigable waters.

§ 420.103 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR § 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) *Cold rolling.* (1) Recirculation mills.

Subpart J

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0000312	0.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104
1,1,1-trichloroethane	.0000312	.0000104
2-Nitrophenol	.00000783	.00000261
Anthracene	.00000312	.00000104
Tetrachloroethylene	.00001563	.00000521

(2) Combination mills.

Subpart J

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000312	0.000104
Lead	.000312	.000104
Zinc	.000312	.000104
1,1,1-trichloroethane	.000312	.000104
2-Nitrophenol	.0000783	.0000261
Anthracene	.0000312	.0000104
Tetrachloroethylene	.0001563	.0000521

(3) Direct application mills.

Subpart J

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000501	0.000167
Lead	.000501	.000167
Zinc	.000501	.000167

(b) *Cold worked pipe and tube mills.* (1) Using water. No discharge of process wastewater pollutants to navigable waters.

(2) Using oil solutions. No discharge of process wastewater pollutants to navigable waters.

§ 420.104 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

(a) Cold rolling mills.

Subpart J

Pollutant or pollutant property	New Source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.001671	0.000626
Oil and grease	.000417	
Chromium	.00001251	.00000417
Lead	.00001251	.00000417
Zinc	.00001251	.00000417
1,1,1-trichloroethane	.00001251	.00000417
2-Nitrophenol	.00000312	.00000104
Anthracene	.000001251	.000000417
Tetrachloroethylene	.00000627	.00000209

pH—Within the range of 6.0 to 9.0.

(b) *Cold worked pipe and tube mills.*
 (1) Using water. No discharge of process wastewater pollutants to navigable waters.

(2) Using oil solutions. No discharge of process wastewater pollutants to navigable waters.

§ 420.105 Pretreatment standards for existing sources.

Except as provided in 40 CFR §§ 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

- (a) *Cold rolling.*
- (1) Recirculation mills.

Subpart J

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
O&G	0.00104	
Chromium	.0000312	0.0000104
Lead	.0000312	.0000104
Zinc	.0000312	.0000104
1,1,1-trichloroethane	.0000312	.0000104
2-Nitrophenol	.00000783	.00000261
Anthracene	.00000312	.00000104
Tetrachloroethylene	.00001563	.00000521

- (2) Combination mills.

Subpart J

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
O&G	0.0104	
Chromium	.000312	0.000104
Lead	.000312	.000104
Zinc	.000312	.000104

Subpart J—Continued

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
1,1,1-trichloroethane	.000312	.000104
2-Nitrophenol	.0000783	.0000261
Anthracene	.0000312	.0000104
Tetrachloroethylene	.0001563	.0000521

- (3) Direct application mills.

Subpart J

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
O&G	0.0167	
Chromium	.000501	0.000167
Lead	.000501	.000167
Zinc	.000501	.000167

(b) *Cold worked pipe and tube mills.*—(1) Using water. No discharge of process wastewater pollutants to publicly owned treatment works.

(2) Using oil solutions. No discharge of process wastewater pollutants to publicly owned treatment works.

§ 420.106 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

- (a) Cold rolling mills.

Subpart J

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
O&G	0.000417	
Chromium	.00001251	0.00000417
Lead	.00001251	.00000417
Zinc	.00001251	.00000417
1,1,1-trichloroethane	.00001251	.00000417
2-Nitrophenol	.00000312	.00000104
Anthracene	.000001251	.000000417
Tetrachloroethylene	.00000627	.00000209

pH—Within the range of 6.0 to 9.0.

(b) *Cold worked pipe and tube mills.*—(1) Using water. No discharge of process wastewater pollutants to publicly owned treatment works.

(2) Using oil solutions. No discharge of process wastewater pollutants to publicly owned treatment works.

§ 420.107 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30–32 any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

- (a) *Cold rolling.*
- (1) Recirculation mills.

Subpart J

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.00783	0.00261
O&G	.000312	.00104

pH—Within the range of 6.0 to 9.0.

- (2) Combination mills.

Subpart J

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0417	0.0156
O&G	0.0104	

pH—Within the range of 6.0 to 9.0.

- (3) Direct application mills.

Subpart J

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0688	0.0250
O&G	0.0167	

pH—Within the range of 6.0 to 9.0.

(b) *Cold worked pipe and tube mills.*—(1) Using water. No discharge of process wastewater pollutants to navigable waters.

(2) Using oil solutions. No discharge of process wastewater pollutants to navigable waters.

Subpart K—Alkaline Cleaning Subcategory

§ 420.110 Applicability; description of the alkaline cleaning subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from operations in which steel and steel products are immersed in alkaline cleaning baths to remove mineral and animal fats or oils from the steel, and those rinsing operations which follow such immersion.

§ 420.111 Specialized definitions.

(a) The term "batch" means those alkaline cleaning operations which process steel products such as coiled wire, rods, and tubes in discrete batches or bundles.

(b) The term "continuous" means those alkaline cleaning operations which process steel products other than in discrete batches or bundles.

§ 420.112 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Subpart K

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0156	0.0052
pH—Within the range of 6.0 to 9.0.		

§ 420.113 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. [Reserved]

§ 420.114 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

Subpart K

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.00828	0.00310
O&G	.00210	
pH—Within the range of 6.0 to 9.0.		

§ 420.115 Pretreatment standards for existing sources.

Any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403.

§ 420.116 Pretreatment standards for new sources.

Any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403.

§ 420.117 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR §§ 125.30–32 any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Subpart K

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0156	0.0052
pH—Within the range of 6.0 to 9.0.		

Subpart L—Hot Coating Subcategory

§ 420.120 Applicability; description of the hot coating subcategory.

The provisions of this subpart are applicable to discharges and to the introduction of pollutants into publicly owned treatment works resulting from the operations in which steel is coated with zinc, terne metal, or other metals by the hot dip process, and those rinsing operations associated with that process.

§ 420.121 Specialized definitions.

(a) The term "galvanizing" means coating steel products with zinc by the

hot dip process including the immersion of the steel product in a molten bath of zinc metal, and the related operations preceding and subsequent to the immersion phase.

(b) The term "terne coating" means coating steel products with terne metal by the hot dip process including the immersion of the steel products in a molten bath of lead and tin metals, and the related operations preceding and subsequent to the immersion phase.

(c) The term "other coatings" means coating steel products with metals other than zinc or terne metal by the hot dip process including the immersion of the steel products in a molten bath of metal, and the related operations preceding and subsequent to the immersion phase.

(d) The term "fume scrubber" means wet air pollution control devices used to remove and clean fumes originating in hot coating operations.

(e) The term "strip, sheet and miscellaneous products" means steel products other than wire products and fasteners.

(f) The term "wire products and fasteners" means steel wire, products manufactured from steel wire, and steel fasteners manufactured of steel wire or other steel shapes.

§ 420.122 Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

Except as provided in 40 CFR §§ 125.30–32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) *Galvanizing.* (1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days.
	Kg/kg (lb/1,000 lb) of products	
TSS	0.375	0.125
O&G	.1125	.0375
Chromium	.0225	.0075
Chromium (Hexavalent)	.00015	.00005
Zinc	.0375	.0125
pH—Within the range of 6.0 to 9.0.		

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.750	0.250
O&G	.225	.075
Chromium	.0450	.0150
Chromium (Hexavalent)	.00030	.00010
Zinc	.0750	.0250
pH—Within the range of 6.0 to 9.0.		

(3) Wire products and fasteners without fume scrubbers

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	1.500	0.500
O&G	.450	.150
Chromium	.030	.010
Chromium (Hexavalent)	.00060	.00020
Zinc	.150	.050
pH—Within the range of 6.0 to 9.0.		

(4) Wire products and fasteners with fume scrubbers,

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	2.4375	0.8125
O&G	.7313	.2438
Chromium	.04875	.01625
Chromium (Hexavalent)	.000975	.000325
Zinc	.2438	.0813
pH—Within the range of 6.0 to 9.0.		

(b) *Terne coating.* (1) Without fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.375	0.125
O&G	.1125	.0375
Lead	.00375	.00125
Tin	.0375	.0125
pH—Within the range of 6.0 to 9.0.		

(2) With fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.750	0.250
O&G	.225	.0750
Lead	.00750	.00250
Tin	.0750	.0250
pH—Within the range of 6.0 to 9.0.		

(c) *Other coatings.* (1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.375	0.125
O&G	.1125	.0375
Cadmium*	.00375	.00125
Chromium	.00150	.00050
Lead	.00375	.00125
Zinc	.0225	.00750
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.750	0.250
O&G	.225	.075
Cadmium*	.00750	.00250
Chromium	.00300	.00100
Lead	.00750	.00250
Zinc	.0450	.0150
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	1.50	0.500
O&G	.450	.150
Cadmium*	.0150	.0050

Subpart L—Continued

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	.0150	.0050
Lead	.0150	.0050
Zinc	.090	.030
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	2.438	0.813
O&G	.731	.244
Cadmium*	.02438	.00813
Chromium	.02438	.00813
Lead	.02438	.00813
Zinc	.1483	.0488
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

§ 420.123 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

Except as provided in 40 CFR §§ 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

(a) *Galvanizing.*

(1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001878	0.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002504	0.0000835
Lead	0.0002504	0.0000835
Zinc	0.0002504	0.0000835

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0007512	0.0002504
Lead	0.0007512	0.0002504
Zinc	0.0007512	0.0002504

(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000939	0.000313
Lead	0.000939	0.000313
Zinc	0.000939	0.000313

(b) *Terne coating.*

(1) Without fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001878	0.0000626
Lead	0.0001878	0.0000626
Zinc	0.0001878	0.0000626

(2) With fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002504	0.0000835
Lead	0.0002504	0.0000835
Zinc	0.0002504	0.0000835

(c) *Other coatings.*

(1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0001878	0.0000626
Chromium	0.0001878	0.0000626
Lead	0.0001878	0.0000626
Zinc	0.0001878	0.0000626

*The limitations for cadmium apply only to cadmium coating operations.

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0002504	0.0000835
Chromium	0.0002504	0.0000835
Lead	0.0002504	0.0000835
Zinc	0.0002504	0.0000835

*The limitations for cadmium apply only to cadmium coating operations.

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0007512	0.0002504
Chromium	0.0007512	0.0002504
Lead	0.0007512	0.0002504
Zinc	0.0007512	0.0002504

*The limitations for cadmium apply only to cadmium coating operations.

(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.000939	0.000313
Chromium	0.000939	0.000313
Lead	0.000939	0.000313
Zinc	0.000939	0.000313

*The limitations for cadmium apply only to cadmium coating operations.

§ 420.124 New source performance standards.

The discharge of wastewater pollutants from any new source subject to this subpart shall not exceed the standards set forth below.

(a) *Galvanizing.*

(1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.02504	0.00038
O&G	0.0026	
Chromium	0.001878	0.0000626
Lead	0.001878	0.0000626
Zinc	0.001878	0.0000626

pH—Within the range of 6.0 to 9.0.

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.03339	0.0125
O&G	0.0035	
Chromium	0.002504	0.0000626
Lead	0.002504	0.0000626
Zinc	0.002504	0.0000626

pH—Within the range of 6.0 to 9.0.

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.1002	0.03752
O&G	.02504	
Chromium	.0007512	.0002504
Lead	.0007512	.0002504
Zinc	.0007512	.0002504
pH—Within the range of 6.0 to 9.0.		

(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.1252	0.0469
O&G	.0313	
Chromium	.000939	.000313
Lead	.000939	.000313
Zinc	.000939	.000313
pH—Within the range of 6.0 to 9.0.		

(b) Terne coating.

(1) Without fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.02504	0.00938
O&G	.00626	
Chromium	.0001878	.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626
pH—Within the range of 6.0 to 9.0.		

(2) With fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.03339	0.0125
O&G	.00835	
Chromium	.0002504	.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835
pH—Within the range of 6.0 to 9.0.		

(c) Other coatings.
(1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.02504	0.00938
O&G	.00626	
Cadmium*	.0001878	.0000626
Chromium	.0001878	.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.03339	0.0125
O&G	.00835	
Cadmium*	.0002504	.0000835
Chromium	.0002504	.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.1002	0.03752
O&G	.02504	
Cadmium*	.0007512	.0002504
Chromium	.0007512	.0002504
Lead	.0007512	.0002504
Zinc	.0007512	.0002504
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

(4) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	New source performance standards	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
TSS	0.1252	0.0469
O&G	.0313	
Cadmium*	.000939	.000313
Chromium	.000939	.000313
Lead	.000939	.000313
Zinc	.000939	.000313
pH—Within the range of 6.0 to 9.0.		

*The limitations for cadmium apply only to cadmium coating operations.

§ 420.125 Pretreatment standards for existing sources.

Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for existing sources.

(a) *Galvanizing.* (1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
Chromium	0.0001878	0.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (1b/1,000 lb) of product	
Chromium	0.0002504	0.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0007512	0.0002504
Lead	.0007512	.0002504
Zinc	.0007512	.0002504

(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000939	0.000313
Lead	.000939	.000313
Zinc	.000939	.000313

(b) *Terne coating.* (1) Without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001878	0.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626

(2) With fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002504	0.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835

(c) *Other coating.* (1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0001878	0.0000626
Chromium	.0001878	.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626

*The limitations for cadmium apply only to cadmium coating operations.

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0002504	0.0000835
Chromium	.0002504	.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835

*The limitations for cadmium apply only to cadmium coating operations.

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0007512	0.0002504
Chromium	.0007512	.0002504
Lead	.0007512	.0002504
Zinc	.0007512	.0002504

*The limitations for cadmium apply only to cadmium coating operations.

(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for existing sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.000939	0.000313
Chromium	.000939	.000313
Lead	.000939	.000313
Zinc	.000939	.000313

*The limitations for cadmium apply only to cadmium coating operations.

§ 420.126 Pretreatment standards for new sources.

Except as provided in 40 CFR § 403.7, any new source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR Part 403 and achieve the following pretreatment standards for new sources.

(a) *Galvanizing.*

(1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001878	0.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002504	0.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0007512	0.0002504
Lead	.0007512	.0002504
Zinc	.0007512	.0002504

(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.000939	0.000313
Lead	.000939	.000313
Zinc	.000939	.000313

(b) *Terne coating*. (1) Without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0001878	0.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626

(2) With fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Chromium	0.0002504	0.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835

(c) *Other coatings*. (1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0001878	0.0000626
Chromium	.0001878	.0000626
Lead	.0001878	.0000626
Zinc	.0001878	.0000626

* The limitations for cadmium apply only to cadmium coating operations.

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0002504	0.0000835
Chromium	.0002504	.0000835
Lead	.0002504	.0000835
Zinc	.0002504	.0000835

* The limitations for cadmium apply only to cadmium coating operations.

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.0007512	0.0002504
Chromium	.0007512	.0002504
Lead	.0007512	.0002504
Zinc	.0007512	.0002504

* The limitations for cadmium apply only to cadmium coating operations.

(4) Wire products and fasteners with fume scrubbers

Subpart L

Pollutant or pollutant property	Pretreatment standards for new sources	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
Cadmium*	0.000939	0.000313
Chromium	.000939	.000313
Lead	.000939	.000313
Zinc	.000939	.000313

* The limitations for cadmium apply only to cadmium coating operations.

§ 420.127 Effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

Except as provided in 40 CFR 125.30-.32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional control technology.

(a) *Galvanizing*. (1) Strip, sheet, and miscellaneous products without fume scrubbers

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.02504	0.00939
O&G	.00626	
pH—Within the range of 6.0 to 9.0		

(2) Strip, sheet, and miscellaneous products with fume scrubbers

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.03339	0.01251
O&G	.00835	
pH—Within the range of 6.0 to 9.0		

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1002	0.03752
O&G	.0250	
pH—Within the range of 6.0 to 9.0		

(4) Wire products and fasteners without fume scrubbers.

Subpart K

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.1252	0.0469
O&G	.0313	
pH—Within the range of 6.0 to 9.0		

(b) *Terne coating*.

(1) Without fume scrubbers.

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.3750	0.1250
O&G	.1125	.0375
pH—Within the range of 6.0 to 9.0.		

(2) With fume scrubbers.

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.03339	0.01251
O&G	.00635	
pH—Within the range of 6.0 to 9.0.		

(c) Other coatings.

(1) Strip, sheet, and miscellaneous products without fume scrubbers.

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1,000 lb) of product	
TSS	0.0376	0.0188
O&G	.00626	
pH—Within the range of 6.0 to 9.0.		

(2) Strip, sheet, and miscellaneous products with fume scrubbers.

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	0.03339	0.01251
O&G	.00635	
pH—Within the range of 6.0 to 9.0.		

(3) Wire products and fasteners without fume scrubbers.

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	0.1504	0.0752
O&G	0.02504	
pH—Within the range of 6.0 to 9.0.		

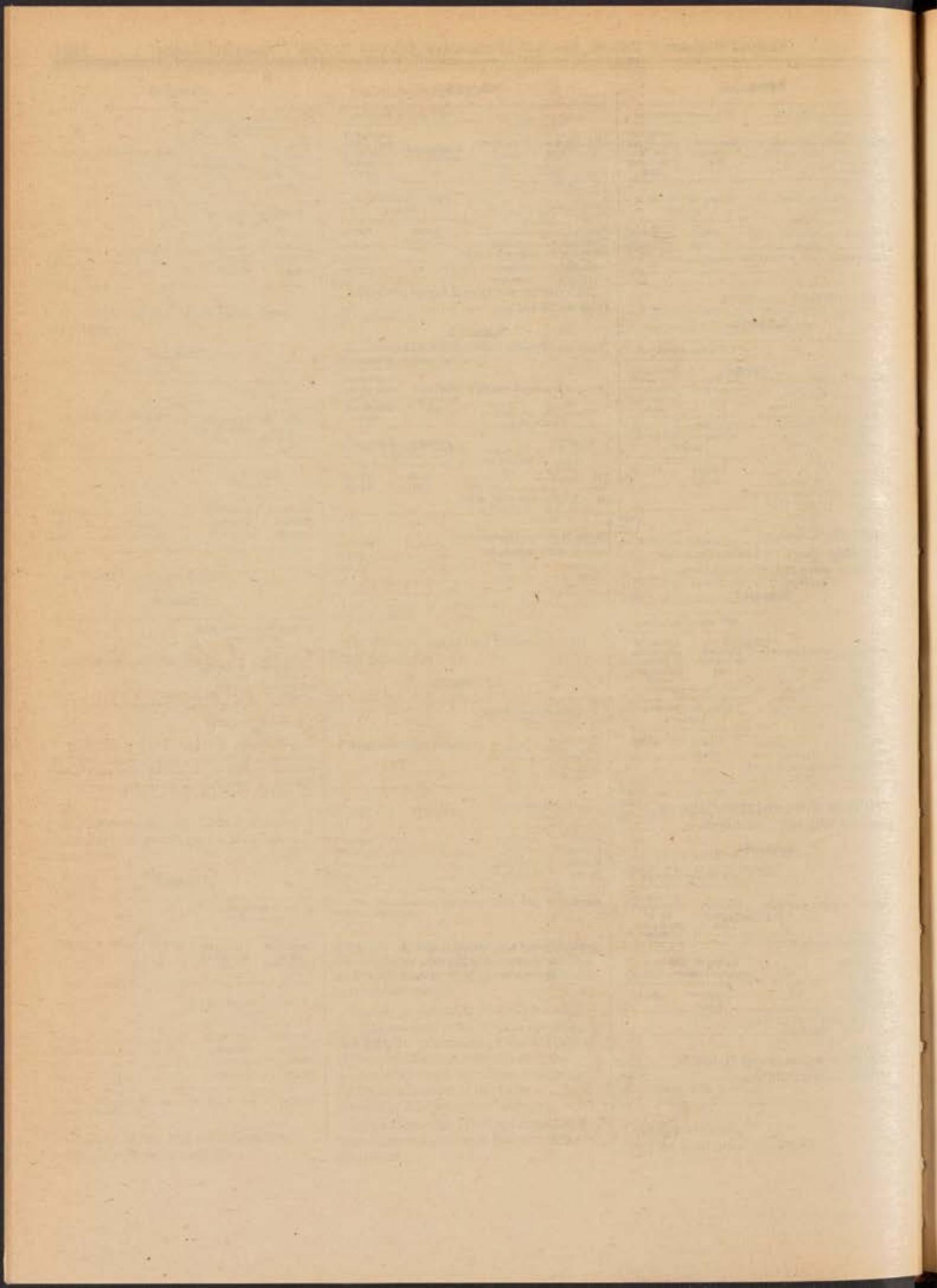
(4) Wire products and fasteners with fume scrubbers.

Subpart L

Pollutant or pollutant property	BCT effluent limitations	
	Maximum for any one day	Average of daily values for 30 consecutive days
	Kg/kg (lb/1000 lb) of product	
TSS	2.438	0.6125
O&G	0.731	0.2438
pH—Within the range of 6.0 to 9.0.		

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Part III

Environmental Protection Agency

**Control of Air Pollution From New Motor
Vehicles and New Motor Vehicle Engines;
Particulate Regulation for Heavy-Duty
Diesel Engines**

**ENVIRONMENTAL PROTECTION
AGENCY**
40 CFR Part 86
[Docket No. A-80-18; AMS-FRL-1628-7]
**Control of Air Pollution From New
Motor Vehicles and New Motor Vehicle
Engines; Particulate Regulation for
Heavy-Duty Diesel Engines**
AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The proposed regulation would establish a standard for the emission of particulate matter from heavy-duty diesel engines.¹ Beginning with the 1986 model year, this standard would be 0.25 gram per brake horsepower-hour (g/BHP-hr) (0.093 gram per megajoule (g/MJ)). Although this standard represents about a two-thirds reduction in particulate emissions from uncontrolled levels, it is judged feasible without increasing emissions of nitrogen oxides (NOx). The proposed regulation would also amend the emission testing regulations at 40 CFR Part 86 to establish procedures for the measurement of particulate emissions from new heavy-duty diesel engines to determine compliance with the particulate emission standard. In addition, this regulation would incorporate compliance testing of production heavy-duty engines for particulate emissions under the Selective Enforcement Auditing (SEA) program beginning with the 1986 model year.

In a related rulemaking action, EPA will soon propose a revised NOx emission standard for these same heavy-duty diesels, along with revised NOx emission standards for light-duty trucks and heavy-duty gasoline engines for 1986 and later model years. In order to ensure that these two proposals are mutually compatible, EPA will restrict the degree of NOx emission reduction required from heavy-duty diesels to that which is attainable with the proposed particulate standard in effect. This relationship between the two rulemaking actions affecting heavy-duty diesels is outlined in greater detail later in the section entitled *Technology*.

DATES: Public Hearing: There will be a public hearing on the provisions of this proposed regulation approximately 45 days after publication of this document. The exact time and place will be

announced at a later date in a subsequent Federal Register notice.

EPA will consider all written comments received on or before the 30th day following the public hearing. EPA requests that, to the extent possible, comments be submitted prior to the hearing.

ADDRESSES: Interested persons may submit written comments to the: Central Docket Section A-130, West Tower Lobby Gallery 1, U.S. Environmental Protection Agency, Attn: Docket No. A-80-18, 401 M Street SW, Washington, D.C. 20460. Also, EPA requests that commenters forward five copies to U.S. Environmental Protection Agency, Attn: Director, Emission Control Technology Division, 2565 Plymouth Road, Ann Arbor, MI 48105.

Copies of materials relevant to this rulemaking action are contained in Public Docket No. A-80-18 at the U.S. Environmental Protection Agency, Central Docket Section, West Tower Lobby Gallery 1, 401 M Street, S.W., Washington, D.C. 20460. The Central Docket Section is open to visitors Monday through Friday from 8:00 a.m. to 4:00 p.m. (As provided in 40 CFR Part 2 the Agency may charge a reasonable fee for copying services.)

FOR FURTHER INFORMATION CONTACT: Richard A. Rykowski, Environmental Protection Agency, 2565 Plymouth Road, Ann Arbor, MI 48105. Telephone: (313) 668-4339 (FTS) 374-8339.

SUPPLEMENTARY INFORMATION:

Comments and the Public Docket: During final rulemaking EPA will consider all written comments received on or before the 30th day following the public hearing. EPA requests that, to the extent possible, comments be submitted prior to the hearing. EPA will keep the record of the public hearing open for submission of rebuttal and other information following the close of the hearing until the above mentioned date.

It is EPA's intention to assure all interested parties an opportunity to study all information which may become the basis for EPA's final action in this proceeding. Accordingly, the Agency will not consider in this rulemaking any material which cannot be made publicly available. Parties who wish to submit information in response to this Notice of Proposed Rulemaking are cautioned that EPA will not consider, but will return to the commenter, any comments which are claimed, in whole or in part, to be confidential.

Authority: Statutory authority and mandate for this action are provided under Sections 202, 206 and 301(a) of the Clean Air Act (42 U.S.C. 7521, 7525 and 7601). Section 202(a)(3)(A)(iii) of the Act provides that, "The

Administrator shall prescribe regulations under paragraph (1) of this subsection applicable to emissions of particulate matter from classes or categories of vehicles manufactured during and after model year 1981 (or during any earlier model year, if practicable)." Section 206(a)(1) provides, in part, that "the Administrator shall test, or require to be tested in such manner as he deems appropriate, any new motor vehicle . . . to determine whether such vehicle . . . conforms with the regulations prescribed under Section 202 of this Act." Section 301(a) provides, in part, that "the Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this Act."

Background: Despite significant gains made in the control of total suspended particulate (TSP) emissions from stationary sources, there are still many air quality regions which are not able to meet the primary National Ambient Air Quality Standard (NAAQS) for TSP of 75 micrograms per cubic meter. As diesel engines continue over time to power an even greater portion of the nation's heavy-duty vehicles (on-the-road trucks and buses whose gross vehicle weight rating exceeds 8,500 pounds), their contribution to ambient levels of total suspended particulate (TSP) will increase over levels that are already significant. Current heavy-duty diesels emit more than twice the particulate per mile emitted by heavy-duty gasoline engines operated on leaded gasoline. Beginning with the 1984 model year, heavy-duty gasoline engines will for the most part be equipped with catalysts in order to comply with stringent standards for hydrocarbons and carbon monoxide. These engines will then be operating on cleaner burning unleaded gasoline and their particulate emissions will decrease by 95-98 percent. Thus, without regulation, heavy-duty diesels will emit 40-100 times the particulate emitted by these 1984 and later model year gasoline engines. Also, due to the extremely low levels of particulate emissions expected from future heavy-duty gasoline engines, EPA does not plan to propose a particulate emission standard for these engines. Table 1 lists particulate emission levels from some heavy-duty diesels currently being used.

If current trends continue, EPA expects the use of diesel engines in heavy-duty vehicles to increase dramatically over the next 15 years. While diesel engines currently power about one-third of all new heavy-duty vehicles sold in the U.S., EPA expects this percentage to increase to 57-69 percent by 1995. This move toward more diesels will increase nationwide particulate emissions from heavy-duty diesels to an estimated 218,000-286,000

¹ A heavy-duty diesel engine is any diesel engine used to power a heavy-duty vehicle, which is an on-the-road vehicle whose gross vehicle weight rating exceeds 8500 pounds or whose frontal area exceeds 45 square feet.

metric tons per year by 1995. Urban areas would be the most heavily affected by these emissions. Ambient particulate levels from heavy-duty diesels alone would reach 2-7 micrograms per cubic meter (annual geometric mean) in cities such as Chicago, Los Angeles, New York, and Dallas. Somewhat lower levels of 2-5 micrograms per cubic meter (annual geometric mean) would occur in smaller cities such as St. Louis, Denver, and Phoenix. These levels would occur over large-scale areas within these cities. Additional particulate levels of 5-6 micrograms per cubic meter (annual geometric mean) would be expected in localized areas within 90 meters of very busy roadways.

Table 1

Engine*	Particulate emissions (g/BHP-hr)	Number of tests
1978 Caterpillar 3208	0.79	7
1979 Caterpillar 3406 (Family 10)	.37	2
1979 Caterpillar 3406 (Family 16)	.52	2
1976 Cummins NTC-350	.60	4
1979 Cummins NTC-350 "Big Cam"	.40	2
1979 Cummins NTC-350	.39	2
1979 Cummins NTC-200	.58	2
1979 Cummins VTB-903*		
No. 1 Fuel	.31	2
No. 2 Fuel	.37	2
1978 DDA 6V-92T	.54	2
1978 DDA 6V-71N*		
No. 1 Fuel	.69	2
No. 2 Fuel	.79	2
1979 DDA 6V-71TA	.38	2
1979 DDA 6V-92TA*6g		
No. 1 Fuel	.48	2
No. 2 Fuel	.55	2
1979 DDA 6V-92TA 10g	.54	2
1979 IHC DTI-466B	.36	2
1979 IHC DT-466	.53	2
1979 Mack ETAZ(B)673A	.58	2
1980 Mack ETSX-676	.63	2

*Engines operated on No. 2 fuel except where noted.

A description of the standard being proposed follows together with a description of the technological, environmental and economic impacts of this regulation. Following these topics are discussions of 1) the alternatives examined by EPA, 2) the major areas of the current Federal Test Procedure that would be changed by the proposed particulate test procedures, 3) the alternative particulate measurement techniques considered for the Federal Test Procedure, and 4) the major differences between the proposed test procedure and that contained in EPA's Draft Recommended Practice of April 1979.

Proposed Standard: The proposed particulate standard for heavy-duty diesel engines is 0.25 gram per brake horsepower-hour (g/BHP/hr) (0.093 gram per megajoule (g/MJ)) beginning with the 1986 model year. Heavy-duty diesel engines must also continue to meet the

appropriate gaseous emission standards for hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NO_x) and smoke standards.

The proposal does not affect the current certification or selective enforcement audit (SEA) processes. It does, however, modify test procedures to provide for particulate measurement. As manufacturers of heavy-duty diesels must currently follow these procedures to demonstrate compliance with gaseous emission and smoke standards, the same will hold true for this particulate standard. The use of a full useful-life deterioration factor, the use of a 10 percent acceptable quality level for SEA and the certification engine selection criteria will all apply to this particulate standard as they will for the HC, CO, NO_x, and smoke standards. However, because the proposed test procedure will provide both particulate and gaseous emission values simultaneously, EPA does not expect this proposed particulate standard to increase the number of engines requiring testing for either certification or SEA.

Technology: The Clean Air Act as amended in August 1977 requires heavy-duty diesel particulate emission control based upon control technology which the Administrator determines will be available for the model year to which such standards apply. Due consideration must also be given to cost, noise, energy, and safety. The 0.25 g/BHP-hr (0.093 g/MJ) standard being proposed today fulfills these requirements.

EPA has, in the course of developing this proposal, tested heavy-duty diesel engines from each of the 5 major manufacturers in order to determine their particulate emission levels; the transient test procedure as described in the "Draft Recommended Practice for Measurement of Gaseous and Particulate Emissions from Heavy-Duty Diesel Engines Under Transient Conditions," April 1979, was used.

Together, the engines produced by these five manufacturers account for approximately 97 percent of the heavy-duty diesel engines sold in this country. The particular engines tested by EPA represent the complete range of engine sizes and applications found in today's fleet and account for roughly 70 percent of U.S. sales. To date, this test program is approximately 80 percent complete. EPA does not believe that delaying this proposal to allow for the completion of this testing is necessary since 1) testing has already been completed on 3 of the 5 major manufacturers' engines, 2) given the representativeness of the tested engines of the other 2 manufacturers and the methodology used to determine the technologically feasible engine-out

particulate level (discussed below), it is unlikely that the level of the proposed standard would be significantly affected by the remaining few engines, and 3) the test program will be completed before promulgation of the final standard. If changes to the standard are warranted based on this new data, the comment period will be reopened.

EPA based the level of this proposed standard on:

1. An engine-out particulate emission level of 0.41 g/BHP-hr (0.153 g/MJ);
2. A 60 percent reduction in engine-out particulate emissions from the application of trap-oxidizers;
3. Over the full useful life, an increase in particulate emissions of up to 20 percent due to engine and trap-oxidizer deterioration; and
4. A 24 percent allowance based on 12 percent variability in the particulate emissions of production engines and a 10 percent acceptable quality limit for a Selective Enforcement Audit. These four points are discussed below.

1. Engine-Out Emission Level

The 0.41 g/BHP-hr engine-out emission level represents the level of particulate emissions which EPA has determined to be technologically feasible by 1986 without the use of aftertreatment devices (i.e., trap-oxidizers) and without taking into consideration in-use deterioration or production variability. This level represents the average of the set of engines made up of each manufacturer's lowest particulate emitting model tested by EPA on No. 2 diesel fuel (see Table 1). This approach was chosen from among several alternatives because it best satisfies the Clean Air Act requirements that the standard "reflect the greatest degree of emission reduction achievable . . . giving appropriate consideration to the cost . . . and to noise, energy, and safety factors . . ."

EPA considered three other approaches in determining the technologically achievable level of engine-out particulate emissions. They were: (1) the worst baseline engine (highest particulate emission level), (2) the lowest particulate emission level among the tested engines, and (3) the highest single emission level among each manufacturer's best engines.

The first option would set the feasible level of engine-out particulate emissions at 0.79 g/BHP-hr (0.29 g/MJ) (See Table 1). Using the engine-out particulate emissions of the "worst" baseline engine or vehicle as the starting point for setting the particulate standard may be an appropriate approach when vehicle parameters, such as engine size or

vehicle weight, are a significant factor in the resulting level of emissions. This approach was followed to some extent in setting the particulate emission standards for light-duty vehicles and light-duty trucks (45 FR 14496, March 5, 1980). Particulate emissions from light-duty vehicles and trucks are directly affected by such parameters as vehicle weight and engine size. EPA found that the differences in particulate emissions of baseline light-duty vehicles were not so much the result of different design features leading to lower particulate levels that could be readily incorporated into other vehicles, but rather the fact that generally heavier vehicles tend to emit greater levels of particulate emissions. In order to avoid setting standards (based on the level achievable by the "best" or smallest vehicles) that would have prevented all light-duty diesels from meeting the standards except subcompacts and small pick-ups with small engines, the Agency based the standards on the lowest particulate level achievable by the "worst" (or largest) diesel-powered baseline vehicle.

However, using the engine-out particulate emissions of the "worst" heavy-duty engine as the starting point for setting the heavy-duty particulate standard would be inappropriate because EPA could find no significant correlation between emissions and such parameters as engine size or type. In fact, EPA found a baseline engine with much lower emissions that was comparable in terms of horsepower and in-use application to the baseline engine which had the highest particulate emissions. The results of EPA's investigation suggest that at least to some extent some engine design features leading to lower particulate emissions (from the worst baseline engine) are available.

Given these findings, EPA could not determine that 0.79 g/BHP-hr represented the "greatest reduction achievable . . ." and Option 1 had to be rejected. To do otherwise would have ignored the reduction potential already demonstrated by every other engine tested to date.

Option 2 would require all engines to reach an engine-out particulate level demonstrated by the best of the baseline engines tested. This level is 0.31 g/BHP-hr (0.12 g/MJ); refer to Table 1. Implicit in the choice of this option would be the judgment that (1) there are no engine design features that have an effect on particulate emissions which cannot be readily incorporated on all other heavy-duty diesels, regardless of their size, application (truck or bus), or

manufacturer, and (2) the features would produce exactly the same low particulate emission level on all engines. EPA has examined the relationship between particulate emissions and engine size or application and has found no significant correlation. Differences were found in the emissions of engines produced by various manufacturers, but no evidence was found to indicate that the designs used to obtain low emissions on some engines were not available to all manufacturers. However, EPA could not find evidence that these design features would have exactly the same effect on every manufacturer's engines, unless each manufacturer would produce an exact replica of the lowest-emitting baseline engine. For example, the primary cause of the low particulate emissions produced by the best baseline engine may have been an improved fuel injection technique which is available to all manufacturers. However, because the fuel injection system is an integral part of the engine and its efficiency could depend on many other engine parameters (whose effect on particulate emissions are not at this time fully understood), the only way to determine the effect of a modification on a given engine would be to test it on that engine. While EPA could have theoretically performed enough tests on a sufficiently large sample of engines in an attempt to demonstrate that all engines could achieve the emissions of the best baseline engine, the cost of such a program would be enormous and the implementation of this particulate standard would have been postponed by at least 1-2 years. This delay would be unacceptable given the mandate of the Clean Air Act. Given the available data, a standard based on Option 2 might well require the major redesign of virtually all engine families for compliance to be assured. EPA has no basis for supporting the contention that such a major redesign effort would even be possible.

Thus, if EPA chose this approach, it would be possible that a large number of engines might not be able to meet the particulate standard in 1986. In this case, the affected manufacturers could only introduce these engines into commerce if they elected to pay a nonconformance penalty on each engine. While EPA believes that nonconformance penalties have a definite role to play in the regulation of heavy-duty vehicles, we do not believe that Congress intended for nonconformance penalties to be paid in order for most engines to be sold. Yet this situation could arise under Option 2.

Option 3 would use as the starting point for setting the standard the highest single engine-out particulate level from the set of engines made up of each of the five major manufacturer's lowest emitting engine. In other words, Option 3 would set the engine-out particulate level at 0.58 g/BHP-hr (0.22 g/MJ) (see Table 1). An examination of Table 1 shows that a full two-thirds of the engines tested are already emitting less particulate than this level. Thus, this option involves the same problem as discussed above with Option 1: it does not give adequate consideration to the control technology already demonstrated by a substantial majority of the engines being produced today. Thus, while this option might appear to solve the problem of Option 2, that of completely ignoring manufacturer-to-manufacturer differences, it raises the same problem associated with Option 1 and EPA had to reject it from further consideration.

The option chosen by EPA, which bases the feasible level of engine-out particulate emissions on the average of the emission levels of the lowest-emitting engine from each of the five major manufacturers, addresses the problems presented by each of the previous three options and best fulfills the congressional mandate to develop a particulate standard which reflects "the greatest degree of emission reduction achievable . . . giving appropriate consideration to the cost . . . and to noise, energy, and safety factors . . ." It takes into consideration, for example, the ability of several manufacturers to build engines which emit relatively low levels of particulate (see Table 1). Failure to give adequate consideration to such accomplishments (as is the case with options 1 and 3) would be contrary to the above stated requirements of the Clean Air Act. Since 4 of the 5 major manufacturers have already demonstrated their ability to build engines below the 0.41 g/BHP-hr engine-out level (these engines represent approximately 20 percent of domestic sales), the cost or feasibility of extending these techniques to other engine families should not be prohibitive and the widespread use of non-conformance penalties should not be necessary—unlike the scenario presented by Option 2. The fifth manufacturer should also be able to comply since (1) its demonstrated ability to build low-NO_x-emitting engines should lessen its possible reliance on NO_x control techniques which increase particulate emissions (relevant discussions of this point can be found in other portions of this document) and (2)

the leadtime available should be sufficient to allow it to incorporate design features of other manufacturers' engines which have already been demonstrated to lower particulate emissions.

By averaging the particulate emission levels of the best engines, the chosen approach recognizes basic manufacturer-to-manufacturer design differences and reflects a more representative range of performance capabilities than other options based on the performance of single engines. The level of 0.41 g/BHP-hr (0.15 g/MJ) is thus a stringent level to use as a starting point, requiring the higher-polluting engines to incorporate, to a great degree, the demonstrated technology of the best engines of a given manufacturer. Yet at the same time it takes into consideration the uncertainties that would be involved in forcing a manufacturer to adopt almost completely the designs employed by its competitors.

While it is possible that a more stringent engine-out level could be identified that would be technologically feasible, EPA does not have sufficient data at this point to support the utilization of such a level. Further study would be required before a more stringent level could be identified and adequately supported. This would only serve to further delay implementation of the standard. Therefore, EPA believes that it is more appropriate to utilize the engine-out level that is supported by the available data. EPA will continue its research in this area and if it becomes evident that a more stringent engine-out level is technologically feasible, EPA will commence a rulemaking to revise the standard accordingly.

Up until this point, we have restricted the discussion of engine-related technology to that already present on existing engines and avoided discussing additional engine modifications which could also reduce particulate emissions. One promising long-term technique in this latter category is to modify the engine to burn methanol. Methanol is an attractive alternative fuel since it (1) can be readily producible from plentiful domestic sources such as coal and biomass, (2) can possibly be produced by more thermally efficient and environmentally acceptable processes than processes which yield synthetic crudes, (3) can be produced with readily available, commercially proven technology which appears to require less capital investment than syncrude production processes, and (4) appears to have the potential for very low particulate, hydrocarbon and biologically active organic emissions.

The potential for reduced particulate emissions makes methanol a promising alternative fuel with regard to this proposed particulate standard. While the proposed particulate standard is achievable without using methanol, its availability and use would simplify the task immensely.

Also of interest is methanol's inherent ability to lower oxides of nitrogen (NO_x) emissions from diesel engines, compared to those same engines operating on diesel fuel. This result is primarily due to the lower combustion temperature of methanol-fueled diesel engines. Since Congress has required that NO_x emissions be significantly reduced from this class of vehicles (this topic is discussed below), use of methanol could aid in achieving this goal.

In order to evaluate the emissions-related characteristics of diesel engines operating on methanol, EPA is conducting tests on a dual-fueled Volvo heavy-duty diesel engine. Combustion is initiated in this engine when a relatively small quantity of diesel fuel is injected into the heated combustion chamber; the second fuel, methanol in this case, is then injected and ignited by the burning diesel fuel and serves as the primary source of energy for the engine. Completely separate injection systems accommodate the different fuels in this system. Tests of other methanol-burning engines are planned for the future.

Since methanol has the potential to help lessen the nation's dependence on foreign oil as well as provide a means of attaining cleaner air, EPA invites comments on its use in diesel engines.

In addition to the use of methanol fuel, there are other techniques available which also can reduce engine-out particulate emissions from heavy-duty diesel engines. However, some of these techniques also tend to increase emissions of nitrogen oxides (NO_x).² This could be a problem, since in addition to mandating particulate control Congress also mandated that NO_x emissions from heavy-duty diesels be reduced significantly in 1985. Specifically, NO_x emissions are to be reduced by 75 percent from uncontrolled gasoline engine levels, which translates to about a 1.7 g/BHP-hr standard. The information available to EPA to date has not shown this NO_x level to be feasible for diesels except by using techniques such as retarded timing which increase fuel consumption and increase particulate emissions markedly. Thus, diesels will need every bit of NO_x control that can be found to reach this

level. Particulate controls that actually increase NO_x emissions would only aggravate this situation. Thus, EPA will not factor the particulate reductions available from these techniques into its determination of the greatest particulate reduction achievable from heavy-duty diesels.

However, there are some techniques available which can reduce engine-out particulate emissions with increasing NO_x emissions. Data available to EPA has shown that modifications made to a Cummins engine and different modifications made to a Caterpillar engine both resulted in lower particulate emissions and lower NO_x emissions. In addition, the latter engine was already a relatively low particulate emitter. These results, plus the general fact that particulate emissions have yet to be directly controlled and consequently, have yet to be factored into design decision, support the conclusion that engine-out particulate emissions could be reduced below the 0.41 g/BHP-hr level without increasing NO_x emissions.

Before applying these reductions to the 0.41 g/BHP-hr particulate level, however, the Congressional mandate to reduce NO_x emissions must be considered once again. This mandate is very specific, requiring reductions to a specified level. The Congressional mandate to reduce particulate emissions is somewhat less specific, calling only for the greatest reduction achievable without specifying a level. It appears that if diesels are to meet or even approach a NO_x level of 1.7 g/BHP-hr, some increase in particulate emissions may have to result. If the particulate reductions mentioned above were left to offset increases in particulate emissions due to NO_x controls, a lower NO_x level could be achieved. This would increase the likelihood of achieving the Congressional mandate to reduce NO_x emissions. As will be described in the next section, significant reductions in particulate emissions are available from aftertreatment techniques, such as trap-oxidizers. Therefore given (1) that there are other technologies which provide significant particulate reduction and (2) the specificity of the NO_x mandate, EPA has decided that the two Congressional mandates would best be met by reserving the engine-out particulate reductions achievable below 0.41 g/BHP-hr to offset the effects of NO_x control. In this way, the degree of NO_x reduction available to diesels will be enhanced, while significant particulate reductions can still occur via use of trap-oxidizers. Thus, 0.41 g/BHP-hr will be used as the lowest engine-out

² See Chapter IV of the Regulatory Analysis for details.

particulate level achievable by all heavy-duty diesels.

While this decision enhances the feasibility of the 1.7 g/BHP-hr NO_x standard it does not insure that net increases in particulate emissions will still not occur due to the implementation of NO_x controls. Any such increases could make the 0.41 g/BHP-hr engine-out particulate level infeasible. To prevent this from occurring, EPA, in its proposals of the NO_x standard will restrict the required NO_x reduction from diesels to that achievable with a 0.41 g/BHP-hr engine-out particulate emission level. In this way, the feasibility of the NO_x standard can be enhanced without affecting the feasibility of the particulate standard being proposed today.

2. Trap-Oxidizers

In addition to reducing particulate emissions formed in the combustion process, additional reductions are available from the application of after-treatment devices, particularly trap-oxidizers. A trap-oxidizer basically consists of a high-temperature trapping material housed in a stainless steel shell. Placed in the exhaust, it collects particulate and periodically (or continually) incinerates (oxidizes) it. The incineration process usually requires an initial minimum exhaust temperature of 450-500° C. Because such temperatures may not normally occur in heavy-duty diesel exhaust, exhaust temperatures may need to be artificially raised to the necessary level to permit regeneration (i.e., incineration).

The particulate collection efficiencies of many trap materials have already been demonstrated. Many materials, such as alumina coated wire mesh and metal wool, have shown efficiencies of up to 85 percent. Slightly modified ceramic monolithic substrates (similar to those used in automotive catalysts) have shown collection efficiencies of up to 84 percent. In determining the technologically achievable level of particulate emissions with aftertreatment, EPA has used a 60 percent initial collection efficiency.³ This is the same efficiency which EPA used to determine the technologically feasible level for the light-duty diesel particulate standard (45 FR 14496).

Several trap-oxidizer regeneration approaches have been investigated. The simplest solution would be to continuously (or near-continuously) oxidize the particulate, in which case the trap-oxidizer would function much like a diesel catalytic converter. The problem with diesel converters is simply in maintaining the high-temperature

conditions that ensure continual oxidation. Much effort is being expended on producing converters which would function on diesels, and designs have been tested by EPA that are close to what is needed. An alternative is to oxidize the particulate only occasionally, when enough organic material has been collected by the trap to aid the process and when the exhaust temperature is high enough to initiate oxidation. Many approaches have been suggested to initiate the oxidation process. The most promising is the addition of an inlet air throttle, which would limit the intake air into the combustion chambers and raise the temperature of the exhaust. The throttling would be periodic, and could be actuated by a combination of the odometer reading and rack position, or might have to be linked to a controller unit coordinating several parameters such as rack position, back-pressure, exhaust gas recirculation, etc. In a study using light-duty diesels, GM reported that over a 1000-mile series of load-up and regeneration tests, utilizing throttling to initiate oxidation, the trap collection efficiency actually increased slightly. There appear to be no technical problems with utilizing throttling to initiate oxidation, and there is evidence that throttling may possibly reduce engine-out particulate and NO_x emissions slightly.

Collection efficiencies and regeneration techniques have progressed to the point where the most critical issue is whether the efficiency and regeneration mechanism can be maintained over the useful life of the vehicle. At this time, EPA has only limited trap-oxidizer durability data, as researchers have been reluctant to fund durability testing until other more basic questions such as burn-off control were solved. The problems of durability are problems which lend themselves to engineering solutions; no major new technology is required. Under controlled conditions, existing traps have already been shown to retain their trapping capability over many burn-off cycles. The trapping media and engine controls already appear to exist for a full useful life trap. The major problem remaining is one of characterizing the in-use operating conditions of the engine, so that regeneration may be controlled to always insure that the burn-off temperature stays below that which could damage the trap. As this is primarily a matter of optimizing the trap position in the exhaust and the logic used by the burn-off control device, we are confident that the durability

questions will be resolved in the near future.

One aspect of heavy-duty diesel operation which might appear to cause a durability problem is a longer useful life (in terms of miles) relative to light-duty diesels. Indeed, the average useful life of a heavy-duty diesel is currently 475,000 miles, while that of a light-duty diesel is only 100,000 miles. In terms of years, however, the average heavy-duty diesel is used only nine years, as opposed to ten years for light-duty diesels. This provides some indication of the difference in the types of driving characteristic of the two types of vehicles. Heavy-duty diesels may accumulate large amounts of mileage, but they also do it in a short period of time under relatively steady conditions. This type of driving should be much less damaging to a trap than the shorter trip driving of a light-duty vehicle, where the temperature transients, which can structurally stress the trap, should be much greater. Thus, the useful lives in terms of time, rather than mileage, should be the better indicator of durability requirements of the trap. As heavy-duty diesel engines capture more of the lighter truck market now dominated by gasoline engines, their operation will begin to approach that of light-duty vehicles in at least some aspects. However, EPA expects the useful life of these former gasoline-fueled vehicles to remain the same after dieselization as before. This useful life is only 114,000 miles, which is very close to that of light-duty diesels. Thus, EPA expects that heavy-duty diesels will experience no greater trap durability problems than light-duty diesels.

EPA recognizes that trap-oxidizers are not currently available to permit compliance with the proposed 1986 heavy-duty diesel standard, but given sufficient good faith effort by the manufacturers, 60 percent efficient trap-oxidizers should be available in time to be incorporated on the 1986 model year fleet. As discussed above, the basic concept of the trap-oxidizer is well understood. The improvements that are necessary are engineering problems, such as trap placement and the optimization of the regeneration control. The solution to these problems is more a function of the resources allocated to the problem than any scientific or technical breakthrough, which would be the case if an entirely new trapping media were required.

The recently promulgated light-duty diesel particulate standards (45 FR 14496) call for a final level of control in 1985 based on trap-oxidizer technology. Information gained from the study of

³ For further details see the Regulatory Analysis.

trap-oxidizers on light-duty diesels to date has centered on areas such as 1) development of a durable, efficient trapping material, 2) understanding the burn-off process, and 3) development of engine control techniques to ensure proper burn-off. Knowledge gained in these areas should be especially applicable to heavy-duty diesels. However, heavy-duty diesels can often operate under different conditions than their light-duty counterparts. For example, they are at times left to idle for periods of several hours (due to inherent cold-start difficulties and to prevent starter wear). This operating characteristic is important to trap-oxidizer regeneration since exhaust temperatures are very cool at idle; high exhaust temperatures are needed to incinerate collected particulate. Thus, means must be devised to allow for trap-oxidizer regeneration while engines are in this mode. While this problem and others do not appear to be insurmountable they do indicate that some additional design effort will be necessary to incorporate trap-oxidizers onto heavy-duty diesels. To facilitate the application and optimization of these devices onto heavy-duty diesels, an additional year is being provided in this proposal beyond the 1985 date of trap-oxidizer introduction for light-duty diesels.

As mentioned earlier, 1986 is also the year that the forthcoming NO_x proposal will apply for these same engines. Many engine design and operational features of heavy-duty diesels affect both these pollutants (see the Regulatory Analysis for further details). As mentioned earlier, some can cause decreased emissions of one pollutant while causing emission levels of the other to increase. As manufacturers will have to design their engines for particulate control while considering the impact on NO_x emissions (and vice versa) it would be most reasonable to have the two standards apply in the same year, allowing design to occur in parallel. Thus, 1986 appears to be a reasonable date to implement the 0.25 g/BHP-hr particulate standard in light of the design and engineering efforts necessary and because of the close relationship between particulate and NO_x emissions.

Left to the marketplace, it is extremely unlikely that sufficient pressure would be brought to bear on the industry to aggressively pursue trap-oxidizer development. Experience has shown the greatest emission control development work to have taken place when direct regulatory incentives were in place. Since final trap-oxidizer designs are not now available to successfully comply

with the proposed 1986 standard, to the extent that the standard motivates the industry to aggressively pursue research and development it is a "technology-forcing" standard. The term "technology-forcing" often implies that the sought-after technology is completely unknown or unforeseeable, but such is not the case here. The basic concept of the trap-oxidizer is very well understood, and, as explained above, much development has already occurred. Thus, this rulemaking is technology forcing only in the respect that it will encourage a feasible control strategy that might otherwise be ignored.

3. Deterioration of Engine and Trap-Oxidizer

Data indicating the degree of deterioration of heavy-duty diesel engines, with regard to particulate emission, over their useful lives are not available since 1) particulate emissions from heavy-duty diesels have not been regulated before and 2) an adequate test procedure has only recently become available; manufacturers will be required to certify using the transient test procedure beginning with the 1985 model year. However, EPA tests of in-use light-duty diesels having accumulated an average 48,000 miles (77,250 kilometers) indicate that little if any increase in engine-out particulate emissions occurs. With the stability of heavy-duty diesel emissions of other pollutants, the use of similar fuel systems, and the similarity of the general emissions stability of light- and heavy-duty diesels, it is reasonable to project that the engine-out particulate emissions of heavy-duty diesels will deteriorate very little. Heavy-duty diesels were not included in this in-use survey since 1) no zero-mile certification data are available because heavy-duty diesel particulate is not currently regulated and 2) the only available test site has been occupied with the baseline emissions program.

Information on the deterioration of trap-oxidizer efficiency is even more scarce, as none are currently commercially available and durability tests of available prototypes have been waiting until after collection and burn-off techniques were perfected. EPA therefore solicits comments in the areas of anticipated engine and particularly trap-oxidizer deterioration as they relate to particulate emissions. For the purposes of this proposed rulemaking EPA has estimated that the combined engine and trap-oxidizer deterioration will be no more than 20 percent.

4. Selective Enforcement Auditing and Production-Line Variability

In addition to complying with EPA's certification process for new engines, heavy-duty diesel manufacturers are also subject to a Selective Enforcement Audit (SEA) of their production engines, the fourth point mentioned above. As is the case for other regulated pollutants, at least 90 percent of a manufacturer's production engines must meet the proposed particulate standard to keep the probability of failing an SEA below 5 percent. This means that manufacturers must achieve excellent quality control or else design their emission control systems to reach levels below the standard on the average. Otherwise, if the control system were designed to just meet the standard, only about half the engines would pass.

To determine how far a manufacturer would have to design below the standard, two factors must be taken into account: 1) the variability of the particulate emissions of the production engines of a given engine family, and 2) the small number of prototypes upon which the design decision is made. The 10 percent acceptable quality level (AQL) could lead manufacturers to design their engines (on the average) to meet a particulate level 1.28 times the existing standard deviation lower than the standard (assuming a normal distribution of emissions) or manufacturers could improve quality control to reduce variability, which would allow them to design closer to the standard.⁴ While EPA believes that the production variability of particulate emissions could be reduced from existing levels, the lack of data on the existing variability of production engines, plus the lack of data on the ability to reduce variability, prevents a reliable judgment to be made concerning this ability. The absence of available test facilities also prevents any effort by EPA to obtain such data on its own. Since EPA cannot determine in the case of this regulation that reductions in variability will be sufficient to deal with the effect of a 10 percent AQL, it is reasonable to allow for a reduction in the design target for the average vehicle to account for the presence of a 10 percent AQL. As indicated above, this allowance should be 1.28 times the standard deviation of particulate emissions from production engines. While no actual data on the particulate emission variability of production engines are available, EPA assumed that this variability would be similar to that for gaseous emissions, or 12 percent of

⁴For further details see the Regulatory Analysis.

mean emissions.⁵ Given this, the effect of the 10 percent AQL would be to increase the technologically feasible level by 15.4 percent, or a factor of 1.154. Including the effect of basing design decisions on only a small number of prototype engines (assumed to be three in this case) raises this factor to 1.24.

EPA requests data on the actual production line variability of particulate emissions, the degree to which production line variability can be reduced, and also on the methodology used by manufacturers to determine their design targets.

Derivation of Standard: All the above mentioned factors were combined to yield the proposed 0.25 g/BHP-hr standard. First, there is the engine-out particulate level of 0.41 g/BHP-hr which is reduced by 60 percent via trap-oxidizer technology to 0.164 g/BHP-hr. Then, taking into account the effect of emission variability and the 10 percent AQL increases this value by a factor of 1.24 to 0.203 g/BHP-hr. Finally, the deterioration factor is 1.2 increases the technologically feasible level to just under 0.25 g/BHP-hr, which is the level being proposed.

Environmental Impact: The proposed standard will reduce particulate emissions from heavy-duty diesels by 64 percent in 1995 with respect to what would be expected without regulation. Nationwide particulate emissions in 1995 from heavy-duty diesels will be reduced from approximately 218,000-266,000 metric tons per year to 78,000-95,000 metric tons per year. Urban particulate emissions from these vehicles will also decrease 64 percent in 1995 from 79,000-97,000 metric tons per year to 28,000-35,000 metric tons per year. This emission reduction will reduce ambient heavy-duty diesel particulate levels in large cities (e.g., New York, Chicago, Los Angeles) from 1.7-7.2 to 0.6-2.6 micrograms per cubic meter (annual means). Heavy-duty diesel particulate levels in smaller cities (e.g., St. Louis, Pittsburgh, Phoenix) will also decrease from 1.6-4.9 to 0.6-1.8 micrograms per cubic meter (annual means). Localized levels which occur over and above these larger-scale impacts will also decrease from 4.6-5.6 micrograms per cubic meter to 1.6-2.0 micrograms per cubic meter (annual means). These latter impacts could occur as far as 90 meters from very busy roadways.⁶

The above impacts clearly show the significant reductions in ambient

particulate emission levels expected from these regulations. It should be noted, however, that not all types of particulate matter have the same level of impact on human health. Small particles, which are much more likely to be deposited in the alveolar region and which require much longer periods of time to be cleared from the respiratory tract, are believed to be much more deleterious to human health on an equal mass basis than larger particles. Thus, control of diesel particulate (100 percent is less than 15 micrometers in diameter and approximately 97 percent is less than 2.5 micrometers in diameter) is especially important with respect to human health. There is also particular concern over the chemical composition of diesel particulate emissions, as the extractable organic fraction of diesel particulate has been shown to be mutagenic in short-term bioassays. EPA is currently performing a health assessment to determine the carcinogenic risk (if any) to human milk. However, EPA has not based the level of the proposed standard on any presumption of a carcinogenic effect being associated with diesel particulate. Should future results from the diesel health effects studies indicate that further action is necessary to control diesel particulate emissions, EPA will exercise its authority under Title II of the Clean Air Act to do so.

Economic Impact (All Costs are in Terms of 1980 Dollars): EPA expects the retail price of heavy-duty diesel vehicles to increase by approximately \$527-650 in 1986 due to the engine and vehicle modifications necessitated by this regulation. The retail price increase of a new vehicle mentioned above is about 0.5-3.0 percent of the total cost of a new heavy-duty diesel vehicle. The range of costs is due to possible differences in trap-oxidizer systems which may be used on different models. The trap-oxidizer system is also expected to require maintenance costing about \$30 when it is five years old. However, the vehicle modifications involved in adding the trap-oxidizer will eliminate the need to replace the exhaust pipe and muffler throughout the vehicle's life. This will save about \$409 in maintenance costs (undiscounted) during the vehicle's life. In all, vehicle maintenance costs should decrease by \$178 due to the 1986 standard (discounted to year of vehicle purchase). Overall, then, this regulation will cost \$349-472 per vehicle. All of these estimates include profit at both the manufacturer and dealer level. Overall, the increased cost of owning and operating a heavy-duty diesel due to this regulation will be less than 0.3 percent.

Due to past and future increases in the price of gasoline-fueled vehicles due to emission controls and the negligible impact of this regulation on the cost of transporting goods via heavy-duty diesels, EPA expects no decrease in diesel sales relative to the sales of gasoline-fueled vehicles due to aggregate environmental regulation. The aggregate cost of this proposed particulate standard over five years (1986-1990) will be \$249-413 million (present value in 1980) or \$442-731 million (present value in 1986). Two present value reference points are given because two different conventions have been used in the past; the present (1980) and the year the standard is to be implemented (1986).

Taking all of the above findings into account, the costs of applying the technology necessary to meet the proposed standard appear reasonable. EPA has also examined the impact of this proposal on urban areas and selected communities and no adverse consequences are expected.

Cost Effectiveness: Section 202(a)(3)(A)(iii) of the Clean Air Act does not require EPA to conduct a cost benefit analysis. Nevertheless, EPA has examined the cost effectiveness of the proposed particulate standard. In doing this, EPA examined the traditional methodology used to measure cost effectiveness and modified it slightly. The proposed standard appears consistent with recent EPA actions to control stationary and mobile source particulate emissions which in themselves were cost effective.

The traditional measure of cost effectiveness (dollars per metric ton of particulate controlled) can be made more relevant to health improvements by considering only the inhalable (less than or equal to 15 micrometers in diameter) or fine (less than or equal to 2.5 micrometers in diameter) particulate that is controlled. It is the inhalable and, especially, the fine fractions of suspended particulate which appear to have the greatest potential for adverse health impact. When this is done, the marginal cost-effectiveness ratio for the 1986 heavy-duty diesel particulate standard (effect of trap-oxidizers alone) is \$1070-1410 per metric ton of inhalable particulate and \$1070-1550 per metric ton of fine particulate (1980 dollars). When any of these bases are used, modified or unmodified, the cost effectiveness of heavy-duty diesel control is found to be consistent with the cost effectiveness of particulate control strategies implemented in the past.

It is important to emphasize that in some respects the mobile and stationary

⁵ For further details see the Regulatory Analysis.

⁶ Consult the Regulatory Analysis for the methodology followed in determining the air quality impact of heavy-duty diesel particulate emissions.

source strategies for particulate control have certain differences in their primary purposes. Therefore, selection of a measure of effectiveness for comparison purposes has inherent limitations. In spite of these, however, the comparison may still be useful to the degree that it focuses on one of these common purposes, protection of public health and welfare.

There is another step which can be taken to improve the measure of cost effectiveness and that is to relate effectiveness to reductions in ambient pollutant concentrations instead of emission reductions. People's exposure to pollutants is directly related to the ambient pollutant concentration of the air they breathe, but only indirectly related to the emissions from various sources. However, the data necessary to perform such calculations are very difficult to obtain and generally not available. Still, to indicate the potential differences between the air quality impacts of different sources, a rudimentary air quality analysis was performed.⁷ Using indicators of a source's impact on air quality relative to its emissions, EPA found that both heavy- and light-duty diesels produce between 45 and 188 times the ambient particulate concentration as the largest power plants (2,920 megawatt heat input) based on equivalent emission rates. Similarly, both heavy- and light-duty diesels produce between 1.1 and 4.7 times the ambient pollutant concentration as smaller power plants (73 megawatt heat input) based on equivalent emission rates. No localized impacts from either source were examined, only large-scale impacts. If localized impacts had been examined, the results might have been different. The results from other stationary sources could also be quite different.

Just considering differences in the relationship between emissions and air quality, the results of any comparison of cost effectiveness could be changed drastically. Indeed, there are many other factors which should also be considered. As mentioned earlier, the above ratios are only an extremely rough estimate of the relative air quality impacts of diesels and power plants. Many simplifications were necessary in order to make this comparison at all. Overall, however, the results also indicate clearly that control of diesel particulate is not less cost effective than other cost-effective control measures adopted by EPA using the measures of effectiveness discussed above.

Alternative Actions: Control of particulate emissions from heavy-duty diesel vehicles is required by the Clean Air Act. Thus, EPA does not have the discretion to forego control of heavy-duty diesel particulate emissions in favor of other control strategies. However, alternative individual engine standards and/or implementation dates for this heavy-duty diesel particulate standard were examined.

The Clean Air Act requires this particulate standard to "reflect the greatest degree of emission control achievable through the application of technology which the Administrator determines will be available for the model year to which such standards apply." EPA must also give due consideration to cost, energy, and safety. The main goal of our analysis of alternative levels and dates, then, was to determine the level(s) and timing of the standard which best complied with the requirements of the Act.

First, EPA considered implementing a one-step versus a two-step standard. A one-step standard set at the final level of technology (trap-oxidizers) would be available in the same year (1986) as the revised NO_x standards for heavy-duty diesels. As alluded to earlier, manufacturers will be required to certify their engines using the transient test procedure beginning in 1985. This essentially precludes an interim standard earlier than 1985 since it would have to use the 13-mode test procedure, which would not be as representative of in-use particulate emissions as the transient cycle. An interim standard for 1985 would apply for only 1 model year and provide only modest reductions in particulate emissions at a time when no significant increases would be expected, since the NO_x standard would not come into effect until 1986. A standard in 1985 would also divert valuable Agency and industry resources from implementing and meeting the 1986 standards (NO_x and particulate) and shifting them toward a less effective interim particulate standard. In 1986, with the coming of the revised NO_x standard, a particulate standard will be needed to prevent potential increases in particulate emissions. However, by then a standard based on trap-oxidizers could be implemented.

EPA specifically considered a two-step standard with the first standard taking effect in 1986. Under this scenario, the 1986 standard would be based on improved engine design, while the later standard (in this case, 1988) would be based on the use of trap-oxidizers. This alternative would have the advantage of allowing

manufacturers more time to develop trap-oxidizers and also separate this work from that related to engine development. Its disadvantages were the added cost of recertifying all engines in 1988 and delaying the primary air quality benefit of the regulation for two more years. EPA also examined the effect of delay on capital and trap-oxidizer costs, but found no substantial advantage resulting from this approach. In all, EPA found that the leadtime advantages of postponing the final level of control did not outweigh the delay of the air quality benefits of a standard which could be implemented in 1986 based on technology and leadtime considerations. This was particularly true given that there appeared to be no great cost benefit involved with delay. For these reasons, EPA chose a one-step standard in 1986. However, EPA would reconsider a two-step standard approach if additional data warranted such action.

Second, EPA considered the possible choices for the level of this standard. These alternative levels have already been discussed in the section on technology and will not be repeated here. In summary, EPA examined the various levels in light of the Clean Air Act requirement that the standard reflect the greatest reduction potential achievable considering the leadtime available and other specified factors and concluded that the standard which is being proposed was appropriate. The issue of cost has already been discussed previously, so no further mention of it will be made here. Since the proposed standard will not affect the fuel economy of heavy-duty diesels, it is reasonable with respect to energy impacts. Based on numerous successful regenerations of prototype trap-oxidizers, EPA also expects that the application of trap-oxidizer technology can and will be made in such a way as to ensure the safe operation of the vehicle.⁸ Thus, in consideration of all these factors, we chose the level of 0.25 gram per brake horsepower-hour in 1986 proposed today.

The use of an averaging approach upon which to base the actual particulate standard is not planned for this rulemaking. However, EPA is actively exploring the feasibility of emissions averaging and will be proposing an averaging scheme for controlling NO_x emissions from light- and heavy-duty trucks. The results of this analysis of averaging will in part determine if EPA will consider emissions averaging for this heavy-duty

⁷ Consult the Regulatory Analysis for further details.

⁸ Consult the Regulatory Analysis for further details.

diesel particulate standard and other existing mobile source emissions standards through future rulemaking actions.

Major Revisions to the Existing Heavy-Duty Test Procedure: The recently promulgated gaseous emissions regulations for 1984 and later model year heavy-duty engines (45 FR 4136) included a new test procedure for determining gaseous exhaust emissions from heavy-duty engines. The test procedure specified for diesel engines was very similar to that specified for gasoline engines and applied to the same gaseous pollutants (HC, CO, NO_x). With the mandate to regulate particulate emissions, EPA has proposed additions to the heavy-duty diesel test procedure to include the measurement of particulate emissions from diesel engines. These additions will not affect the basic heavy-duty test procedure nor the stringency of the test with respect to gaseous emissions, but merely specify the additional equipment and steps necessary for the measurement of diesel particulate.

Because EPA just recently revamped the heavy-duty engine test procedures and foresaw at that time the need to propose these modifications, we took steps then to ensure that no unnecessary equipment expenses would be incurred by manufacturers and others interested in testing diesel engines. The test procedure modifications being proposed today do require certain pieces of equipment to be used which are not required for gaseous emission testing (e.g., the dilution tunnel). To prevent the need for replacing equipment for measuring gaseous emissions which had been used for only a short period of time (e.g., the dilution tunnel replacing the baffle box) with new equipment to allow measurement of particulate emissions, EPA originally designed the gaseous emission test procedure to allow for the addition of equipment associated with particulate testing without making obsolete any of the equipment used for measuring gaseous emissions. In this way, manufacturers could design their transient test cells to allow for future particulate testing, even though the particulate standards had not yet been proposed, and none of their effort would have been wasted.

Additions and changes to the current Federal Test Procedure (FTP) for diesels that would be brought about by the incorporation of particulate testing are discussed below:

(1) The particulate measurement procedure would require a dilution tunnel and a constant mass sampler (i.e., a heated exchanger must precede the critical flow venturi or the positive

displacement pump). The dilution tunnel would have to be sufficiently long to assure thorough mixing at the sampling probes. The use of a mixing box with extensive baffling was rejected because of suspected particulate loss on its surfaces. A constant mass sampler, as opposed to a constant volume sampler, is necessary for particulate testing to insure that the particulate sample taken is proportional to the entire emissions of particulate from the engine at any given time.

(2) The total mass of particulate emissions would be measured simultaneously with regulated gaseous emissions over the transient cycle. The particulate matter, after dilution and mixing with ambient air in a dilution tunnel, would be collected on filter media (fluorocarbon or fluorocarbon-coated glass fiber) over both the cold and hot start portions of the test. The temperature of the diluted exhaust at the location of particulate sampling would have to be kept below 125° F (51.7° C) at all times. This could be accomplished by either of two methods, single or double dilution. With single dilution, the constant mass sampler would have to be of sufficient capacity to maintain the temperature of the entire diluted exhaust below 125° F (51.7° C) at the particulate probe tip. With double dilution, the temperature of the diluted exhaust in the primary tunnel would be allowed to be well above 125° F (51.7° C), but a second dilution of a fraction of the exhaust flow in the primary tunnel would have to maintain the temperature of this smaller sample below 125° F (51.7° C) at all times during the test.

This 125° F (51.7° C) temperature restriction is necessary to insure that heavy hydrocarbons and other organic compounds, which would become associated with the particles upon ambient dilution in real life, are also measured by EPA's test procedure. This temperature requirement also causes some of these heavy organics to be measured twice, once as particulate and once as hydrocarbons. Before the level of exhaust hydrocarbons is measured under EPA's test procedure, the sample is heated to 375° F (191° C) to drive some of these hydrocarbons off of the particulate. These hydrocarbons on the particulate at 125° F (51.7° C) and in the gaseous phase at 375° F (191° C) may participate in oxidant-forming reactions and therefore should be measured as hydrocarbons. These same hydrocarbons may also remain on the particulate and be inhaled as such and therefore should also be measured as particulate.

As can be seen from an examination of the test procedure amendments being proposed today, EPA has republished the entire Subpart N, which contains the transient test procedure for heavy-duty vehicles, gasoline-fueled and diesel, for the 1980 model year. We did this for a number of reasons. One, we hoped that this would provide the user with a single, comprehensive document containing the heavy-duty test procedure for both gaseous and particulate emissions. This would avoid the need to piece this proposal together with past publications in order to obtain a complete test procedure. Two, while the number of substantive changes to the test procedure is limited, the large amount of internal referencing done in Subpart N for descriptive purposes (e.g., see 86.1310-84) requires many sections to be revised because the references will change (to "-86"). Thus, the majority of the sections in Subpart N would have needed to be revised regardless.

While the republication of Subpart N for the 1986 model year makes it easier to use the test procedure in practice, it also makes it more difficult to identify the revisions being proposed today. To aid those interested in finding these revisions, EPA has listed below the sections of Subpart N which contain proposed substantive revisions. Any revisions contained in other sections should only be revised references or the addition of "particulate" to descriptive sentences which currently describe the test procedure as applying only to the measurement of gaseous emissions.

Sections in Subpart N containing proposed substantive revisions are:

§ 86.1308-86	§ 86.1337-86
§ 86.1310-86	§ 86.1339-86
§ 86.1312-86	§ 86.1342-86
§ 86.1320-86	§ 86.1344-86
§ 86.1327-86	

Test Procedure Alternatives: EPA considered and rejected two alternative techniques for estimating on-the-road particulate emissions. The first was smoke measurement. EPA rejected this technique because 1) smoke does not correlate well with particulate emissions across engine lines and 2) smoke measurements are very inaccurate at the levels encountered over most of the transient cycle.

In spite of this, the presence of the smoke standard has helped to prevent particulate emissions from increasing while no particulate standards were in effect. There is some correlation between smoke and particulate and a worst case test always has some effect on other-than-worst-case conditions. However, a smoke standard is not a viable long-term alternative to a particulate emission standard.

The existing smoke test and standard are being retained along with the addition of particulate testing. The smoke test measures smoke under worst case conditions which are not often encountered over the transient cycle. Therefore, it is unlikely that the particulate standard alone would insure continued compliance with the existing smoke standards. Also, the current smoke standard exists primarily for aesthetic reasons which do not disappear with the addition of particulate testing.

The second technique EPA considered was opti-acoustical measurement. This technique uses a laser beam to heat the particles in the exhaust and measures the resulting pressure waves with a spectrophone. EPA also rejected this technique because (1) it is as yet unproven and (2) it appears to have many of the same correlation problems as smoke measurement, primarily that the acoustical response varies with the chemical composition of the particulate.

Changes from Previous Draft Test Procedure: EPA published the "Draft Recommended Practice for Measurement of Gaseous and Particulate Emissions from Heavy-Duty Diesel Engines Under Transient Conditions" in April 1979 and distributed it on May 8, 1979. Two manufacturers—Caterpillar Tractor Company and Cummins Engine Company—responded to the request for comments on the Draft Recommended Practice. One of the more significant responses was Cummins' comment that substantial errors in the instantaneous proportionality of the sample taken from the primary tunnel (up to 25 percent) might result with the double-dilution sampling technique due to the two second residence time in the secondary tunnel. The effect of such an error on particulate measurements would depend on the particle concentrations at the times the sampling errors occurred. However, these instantaneous concentrations cannot be measured at this time.

In its studies of the two systems to date, EPA has found no evidence that any such sampling error actually affects the mass of particulate collected. Rather, the evidence indicated that the two systems produced very comparable results. However, EPA made one modification to the draft recommended practice which should substantially reduce any instantaneous sampling errors and further ensure that no such errors would affect the mass of particulate collected. EPA has reduced the required residence time of the diluted exhaust in the secondary tunnel

from 2 to 0.25 seconds. The latter residence time was derived from confirmable light-duty diesel testing using the single dilution technique. It represents the total time necessary after dilution to ensure that the gaseous and particulate phases come to equilibrium before the particulate is collected.

The remainder of the comments from both manufacturers related to very detailed aspects of the test procedure. EPA has incorporated these comments, where possible, into the test procedure being proposed today. Some suggested revisions were not made, however, due to the fact that no data were presented to support the viability of the revision. A detailed analysis of the comments is contained in the docket and can also be obtained by calling or writing the contact person for this regulation (shown above).

Selective Enforcement Auditing (SEA): SEA will be performed on production heavy-duty diesel engines beginning in the 1984 model year to determine whether they conform to the regulations under which their respective certificates of conformity were issued. Subpart K of Part 86, SEA of New Gasoline-Fueled and Diesel Heavy-Duty Engines (45 FR 4136, Jan. 21, 1980), describes the program for the testing of these engines. Paragraph § 86.1008-84(a) of Subpart K provides that these engines will be tested in accordance with Subpart N. With the establishment of a new particulate emission standard and the addition of particulate testing procedures to Subpart N, EPA would require SEA testing of heavy-duty diesel engines for compliance with this standard beginning in the 1986 model year.

Nonconformance Penalties: Section 206(g) of the Clean Air Act provides for nonconformance penalties (NCPs) ". . . in the case of any class or category of heavy-duty vehicles or engines to which a standard promulgated under section 202(a) of this Act applies. . . ." As discussed elsewhere in this preamble, EPA believes that all heavy-duty diesel engines will be capable of complying with the proposed standard. However, whenever a manufacturer must do substantial development work and/or make substantial modifications of existing emission control techniques in order to both certify and produce heavy-duty diesel engines capable of complying with all regulatory requirements, there is some risk that unforeseen circumstances could result in "technological laggards," i.e., manufacturers whose heavy-duty diesel engines are incapable of complying with the regulation. Therefore, the heavy-

duty diesel engines affected by this regulation may be subject to NCPs.

The proposed particulate emission standard for heavy-duty diesel engines is partially based on the application of trap-oxidizer exhaust treatment devices. As discussed in the "Technology" section, the basic trap-oxidizer concept is well understood. However, these devices are not currently available to permit compliance with the proposed standard; various engineering improvements still have to be made. Therefore, trap-oxidizers represent a basically new emission control technique for which substantial development work for heavy-duty diesel engines usage is still required. Manufacturers may experience unforeseen problems in the development and application of successful trap-oxidizers, and it is for this reason that EPA intends to make NCPs available for heavy-duty diesel particulate emissions.

The Agency is not proposing the specific penalty rate or the "upper limit" on allowable particulate emissions in this NPRM. These will be proposed at a later date through separate rulemaking, with full opportunity for public comment. EPA's intention to offer NCPs does not affect leadtime considerations for meeting the proposed particulate standard. The availability of NCPs should not be viewed as a mechanism allowing manufacturers to design to a higher emission standard, but rather as a "safety valve" for those who have made good faith efforts, but are experiencing unforeseen problems in compliance. EPA intends to structure the NCPs, as required by the Act, to remove any competitive disadvantage to manufacturers complying with the standard. The penalty will also increase periodically to provide a further incentive to bring nonconforming engines into compliance or to develop new replacement engines as expeditiously as possible.

Evaluation Plan: EPA intends to review the effectiveness and need for continuation of the provisions contained in this action no more than five years after initial implementation of the final regulation. In particular, EPA will solicit comments from affected parties with regard to cost and other burdens associated with compliance and will also review data on the particulate emissions from heavy-duty diesel vehicles built before and after promulgation of the regulation to determine how effective this measure has been.

Reporting and Recordkeeping Requirements: This regulation does not require any new significant reporting or recordkeeping burden. However, it does

add particulate matter to the list of exhaust pollutants which are currently regulated from heavy-duty diesels. As such it will have some impact on the current load of reporting and recordkeeping requirements. Specifically, it will require: 1) submission of the design of all new emission control systems added solely for the purpose of particulate control as part of the manufacturer's application for certification; and 2) inclusion of the rate of particulate emission from affected vehicles along with other test results. Both of these additions are quite minor when compared to the current reporting requirements. Detailed designs of the diesel engine are already required and the only device likely to come under 1) above is the trap-oxidizer. Similarly, results from gaseous emission tests are already required and this regulation will only require the addition of a few numbers to whole pages of values.

Given that the reporting requirements of this regulation only involve minor additions to existing requirements, EPA does not find it reasonable to automatically delete these requirements if affirmative action is not taken within five years. Rather, EPA believes that it is in the public's best interest to perform a review of the reporting requirements of this regulation along with the review of all of the reporting requirements of mobile source air pollution regulation. This review of reporting requirements will be part of an overall review of the regulations themselves which will take place within the next five years.

Note.—The Administrator has determined that this action is a "Significant" regulation. We have prepared a document entitled "Heavy-Duty Diesel Particulate Regulations: Regulatory Analysis" detailing the Regulatory Analysis and other analyses required by Executive Order 12044 and the Economic Impact Assessment required by Section 317 of the amended Clean Air Act. Anyone may review and reproduce this document in the EPA Central Docket Section. Copies are also available upon request.

Dated: December 23, 1980.

Douglas M. Costle,
Administrator.

EPA proposes to amend Subparts A and N of 40 CFR Part 86 as set forth below:

1. Section 86.086-11 is revised to read as follows:

§ 86.086-11 Emission standards for 1986 and later model year diesel heavy-duty engines.

(a)(1) Exhaust emissions from new 1986 and later model year diesel heavy-duty engines shall not exceed the following:

(i) *Hydrocarbons*. 1.3 grams per brake horsepower hour, as measured under transient operating conditions (Subpart N).

(ii) *Carbon monoxide*. 15.5 grams per brake horsepower hour as measured under transient operating conditions (Subpart N).

(iii) *Oxides of nitrogen*. 10.7 grams per brake horsepower hour, as measured under transient operating conditions (Subpart N).

(iv) *Particulate matter*. 0.25 grams per brake horsepower hour, as measured under transient operating conditions (Subpart N).

(2) The standards set forth in paragraph (a)(1) of this section refer to the exhaust emissions generated over operating schedules as set forth in Subpart N and measured and calculated in accordance with those procedures.

(b)(1) The opacity of smoke emissions from new 1986 and later model year diesel heavy-duty engines shall not exceed:

(i) 20 percent during the engine acceleration mode.

(ii) 15 percent during the engine lugging mode.

(iii) 50 percent during the peaks in either mode.

(2) The standards set forth in paragraph (b)(1) of this section refer to exhaust smoke emissions generated under the conditions set forth in Subpart I of this part and measured and calculated in accordance with those procedures.

(c) No crankcase emissions shall be discharged into the ambient atmosphere from any new 1986 model year naturally-aspirated diesel heavy-duty engine. This provision does not apply to turbocharged engines.

(d) Every manufacturer of new motor vehicle engines subject to the standards prescribed in this section shall, prior to taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicle engines in accordance with applicable procedures in Subparts I or N of this part to ascertain that such test engines meet the requirements of paragraphs (a), (b) and (c) of this section.

2. A new § 86.086-28 is proposed to read as follows:

§ 86.086-28 Compliance with emission standards.

(a)(1) Paragraph (a) of this section applies to light-duty vehicles.

(2) The applicable exhaust and fuel evaporative emission standards of this subpart apply to the emissions of vehicles for their useful life.

(3) Since it is expected that emission control efficiency will change with

mileage accumulation on the vehicle, the emission level of a vehicle which has accumulated 50,000 miles will be used as the basis for determining compliance with the standards.

(4) The procedure for determining compliance of a new motor vehicle with exhaust emission standards is as follows:

(i) Separate emission deterioration factors shall be determined from the exhaust emission results of the durability-data vehicle(s) for each engine-system combination. A separate factor shall be established for exhaust HC, exhaust CO, exhaust NOx, and exhaust particulate (diesel vehicles only) for each engine-system combination. A separate evaporative emission deterioration factor shall be determined for each evaporative emission family-evaporative emission control system combination from the testing conducted by the manufacturer (gasoline-fueled vehicles only).

(A) The applicable results to be used in determining the exhaust emission deterioration factors for each engine-system combination shall be:

(1) All valid exhaust emission data from the tests required under § 86.086-26(a)(4) except the zero-mile tests. This shall include the official test results, as determined in § 86.084-29 for all tests conducted on all durability-data vehicles of the combination selected under § 86.086-24(c) (including all vehicles elected to be operated by the manufacturer under § 86.086-24(c)(1)(ii)).

(2) All exhaust emission data from the tests conducted before and after the scheduled maintenance provided in § 86.086-25.

(3) All exhaust emission data from tests required by maintenance approved under § 86.086-25, in those cases where the Administrator conditioned his approval for the performance of such maintenance on the inclusion of such data in the deterioration factor calculation.

(B) All applicable exhaust emission results shall be plotted as a function of the mileage on the system, rounded to the nearest mile, and the best fit straight lines, fitted by the method of least squares, shall be drawn through all these data points. The interpolated 4,000- and 50,000-mile points on this line must be within the low-altitude standards provided in § 86.085-8 or § 86.085-9, as applicable, or the data will not be acceptable for use in calculation of a deterioration factor, unless no applicable data point exceeded the standard. An exhaust emission deterioration factor shall be calculated for each engine-system combination as follows:

Factor = Exhaust emissions interpolated to 50,000 miles divided by exhaust emissions interpolated to 4,000 miles.

These interpolated values shall be carried out to a minimum of four places to the right of the decimal point before dividing one by the other to determine the deterioration factor. The results shall be rounded to three places to the right of the decimal point in accordance with ASTM E 29-67.

(C) An evaporative emissions deterioration factor (gasoline-fueled vehicles only) shall be determined from the testing conducted as described in § 86.086-21(g)(4)(i), for each evaporative emission family- evaporative emission control system combination to indicate the evaporative emission level at 50,000 miles relative to the evaporative emission level at 4,000 miles as follows:

Factor = Evaporative emission level at 50,000 miles minus the evaporative emission level at 4,000 miles.

The factor shall be established to a minimum of two places to the right of the decimal.

(ii)(A) The official exhaust-emission test results for each emission-data vehicle at the 4,000-mile test point shall be multiplied by the appropriate deterioration factor. *Provided:* That if a deterioration factor as computed in paragraph (a)(4)(i)(B) of this section is less than one, that deterioration factor shall be one for the purposes of this paragraph.

(B) The official evaporative emission test results (gasoline-fueled vehicles only) for each evaporative emission-data vehicle at the 4,000-mile test point shall be adjusted by addition of the appropriate deterioration factor. *Provided:* That if a deterioration factor as computed in paragraph (a)(4)(i)(C) of this section is less than zero, that deterioration factor shall be zero for the purposes of this paragraph.

(iii) The emissions to compare with the standard shall be the adjusted emissions of paragraphs (a)(4)(ii) (A) and (B) of this section for each emission-data vehicle. Before any emission value is compared with the standard, it shall be rounded, in accordance with ASTM E 29-67, to two significant figures. The rounded emission values may not exceed the standard.

(iv) Every test vehicle of an engine family must comply with the exhaust emission standards, as determined in paragraph (a)(4)(iii) of this section, before any vehicle in that family may be certified.

(v) Every test vehicle of an evaporative emission family must comply with the evaporative emission standard, as determined in paragraph

(a)(4)(iii) of this section before any vehicle in that family may be certified.

(b)(1) Paragraph (b) of this section applies to light-duty trucks and heavy-duty engines.

(2) The exhaust and fuel evaporative emission standards of § 86.085-9, § 86.086-10, and § 86.086-11, as appropriate, apply to the emissions of vehicles or engines for their useful life.

(3) Since emission control efficiency generally decreases with the accumulation of mileage on the vehicle or engine, deterioration factors will be used in combination with emission-data test results as the basis for determining compliance with the standards.

(4)(i) Paragraph (b)(4) of this section describes the procedure for determining compliance of a new vehicle or engine with exhaust emission standards, based on preliminary deterioration factors supplied by the manufacturer. The procedure described here shall be used for the first model year for which the manufacturer applies for a certificate of conformity with the applicable emission standards for an engine family-control system combination, and for the second model year as well if the criteria of §§ 86.086-26 (b)(3) and (c)(3) are met.

(ii) Separate preliminary exhaust emission deterioration factors, determined from tests of vehicles, engines, subsystems, or components conducted by the manufacturer, shall be supplied for each engine-system combination. Separate factors shall be established for transient HC, CO, and NO_x, idle CO (gasoline vehicles and engines only), and exhaust particulate (diesel light-duty trucks and diesel heavy-duty engines only). For heavy-duty diesel engines, separate factors shall also be established for the acceleration mode (designated as "A"), the lugging mode (designated as "B"), and the peak opacity (designated as "C").

(iii)(A) For transient HC, CO, and NO_x, idle CO (gasoline vehicles and engines only), and exhaust particulate (diesel light-duty trucks and diesel heavy-duty engines only), the official exhaust emission results for each emission-data vehicle at the 4,000-mile test point, or for each emission-data engine at the 125 hours test point, shall be adjusted by multiplication by the appropriate deterioration factors. However, if the deterioration factors supplied by the manufacturer is less than one, it shall be one for the purposes of this paragraph.

(B) acceleration smoke ("A"), lugging smoke ("B"), and peak smoke ("C"), the official exhaust emission results for each emission-data engine at the 125-hour test point shall be adjusted by the

addition of the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this paragraph.

(iv) The emission values to compare with the standards shall be the adjusted emission values of paragraph (b)(4)(iii) of this section rounded to two significant figures in accordance with ASTM E 29-67 for each emission-data vehicle or engine.

(5)(i) Paragraph (b)(5) of this section describes the procedure for determining compliance of a new vehicle or engine with exhaust emission standards, based upon partial or full results of in-use mileage accumulation.

(ii) Separate emission deterioration factors shall be determined from the emission results collected to date from the durability-data vehicles or engines in each engine-system combinations. Separate factors shall be established for transient HC, CO, and NO_x, idle CO (gasoline vehicles and engines only), and exhaust particulate (diesel light-duty trucks and diesel heavy-duty engines only). For heavy-duty diesel engines, separate factors for smoke shall also be established for the acceleration mode (designated as "A"), the lugging mode (designated as "B"), and the peak opacity (designated as "C").

(A) The applicable results to be used in determining the deterioration factors for each combination shall be:

(1) The results of the emission tests conducted on light-duty trucks durability-data vehicles after accumulating 4,000-mile according to the Durability Driving Schedule, or on heavy-duty durability-data engine after accumulating 125 hours manufacturer's dynamometer service accumulation schedule. The mileage point for these results shall be taken to be 4,000 miles for the purpose of this section.

(2) The results of all emission tests conducted on durability-data vehicles and engines during in-use mileage accumulation, as required or permitted by § 86.086-26(b)(5)(v) (light-duty trucks) or § 86.086-26(c)(5)(v) (heavy-duty engines), except those excluded under § 86.086-25(b)(1)(xi) or § 86.086-26(b)(5)(vii) for light-duty trucks, or § 86.086-25(b)(1)(xi) or § 86.086-26(c)(5)(vii) for heavy-duty engines. The mileage points for heavy-duty engine results shall be adjusted by the addition of 4,000 miles at the time of deterioration factor calculation.

(B) All applicable exhaust emission results shall be plotted as a function of accumulated in-use mileage. Separate plots shall be made for each durability data vehicle or engine. All least squares regression lines plus high mileage values

and low mileage values resulting from the procedures of paragraph (b)(5) shall be shown on these plots.

(C)(1) Deterioration factors for each vehicle or engine for transient HC, CO, and NO_x, for idle CO (gasoline-fueled vehicles and engines only), and exhaust particulate (light-duty diesel trucks and heavy-duty diesel engines only) shall be calculated by dividing the high mileage value of paragraph (b)(5)(ii)(E) by the low mileage value of paragraph (b)(5)(ii)(D). A factor less than one shall be set equal to one.

(2) Deterioration factors for each heavy-duty diesel engine for acceleration smoke ("A"), lugging smoke ("B"), and peak smoke ("C"), shall be calculated by subtracting the low mileage value of paragraph (b)(5)(ii)(D) from the high mileage value of paragraph (b)(5)(ii)(E). A negative factor shall be set equal to zero.

(D) The low mileage value shall be based upon all applicable data for mileage prior to the actual change point for any external aftertreatment device (e.g., catalyst or particulate trap-oxidizers). The best fit straight line shall be fitted to this data by the method of least squares. The low mileage values shall be the value of this line interpolated to the 4,000-mile point.

(E) The high mileage value shall be calculated as follows:

(1) Prior to the actual change for any external aftertreatment device, the high mileage value shall be the larger of the values resulting from the following two methods.

(i) The best fit straight line fitted by the method of least squares to the applicable data and extrapolated (or interpolated if the in-use mileage accumulation is complete) to the high mileage point. The high mileage point shall be either the useful life or a mileage which represents a point 50 percent of the useful life past the current mileage, whichever is smaller.

(ii) The highest of any data points (or average of results if the manufacturer conducted multiple tests at each point) which exceed two standard errors of the estimate from the best fit straight line fitted by the method of least squares to the applicable data.

(2) After the actual change of any external aftertreatment device, in the case where only one applicable mileage test point exists after the change, the value (or average of values) shall be compared to the value of the best fit straight line of paragraph (b)(5)(ii)(D) extrapolated to that mileage. If the value (or average of values) falls below the line it shall not be used in the calculations, and the high mileage value shall be as determined in subparagraph

(1) above. If the value (or average of values) falls on or above the line, the data for the test point after the change of the external aftertreatment device shall be added to the data used in subparagraph (1) above and the high mileage value recomputed by the procedure of subparagraph (1). In this case, the low mileage value of paragraph (b)(5)(ii)(D) shall also be recalculated based upon inclusion of the additional data.

(3) After the actual change of any external aftertreatment device, in the case where two or more applicable data shall be divided into two sets. The first set shall include all data for mileage points prior to the change point. The second set shall include all data for mileage points after the change point. The procedure of subsection (1) above shall be performed separately for each set of data. The actual high mileage value shall be that from whichever data set yields the higher value.

(F) The single in-use deterioration factor for each engine family-control system combination for each of transient HC, CO, and NO_x, idle CO (gasoline vehicles and engines only), exhaust particulates (diesel light-duty trucks and diesel heavy-duty engines only) and the acceleration, lugging, and peak capacity smoke modes (heavy-duty diesel engines), shall be the arithmetic mean of the corresponding factors for each engine as determined in paragraph (b)(5)(ii)(C) of this section.

(iii)(A) For transient HC, CO, and NO_x, idle CO (gasoline vehicles and engines only), and exhaust particulate (diesel light-duty trucks and diesel heavy-duty engines only), the official exhaust emission results for each emission-data vehicle or engine at the 4,000-mile or 125-hour test point shall be adjusted by multiplication by the appropriate deterioration factor.

(B) For acceleration smoke ("A"), lugging smoke ("B"), and peak smoke ("C"), the official exhaust emission results for each emission-data engine at the 125-hour test point shall be adjusted by the addition of the appropriate deterioration factor.

(iv) The emission values to compare with the standards shall be the adjusted emission values of paragraph (b)(4)(iii) of this section rounded to two significant figures in accordance with ASTM E 29-67 for each emission-data vehicle or engine.

(6)(i) Paragraph (b)(6) of this section describes the procedure for determining compliance of a new light-duty truck with fuel evaporative emission standards. The procedure described here shall be used for all vehicles in all model years.

(ii) The manufacturer shall determine, based on testing described in § 86.086-21(b)(4)(ii), and supply an evaporative emission deterioration factor for each evaporative emission family- evaporative emission control system combination. The factor shall be calculated by subtracting the emission level at 4,000 miles from the emission level at the useful life point.

(iii) The official evaporative emission test results for each evaporative emission-data vehicle at the 4,000-mile test point shall be adjusted by the addition of the appropriate deterioration factor. However, if the deterioration factor supplied by the manufacturer is less than zero, it shall be zero for the purposes of this paragraph.

(iv) The emission value to compare with the standards shall be the adjusted emission value of paragraph (b)(6)(iii) of this section rounded to two significant figures in accordance with ASTM E 29-67 for each evaporative emission-data vehicle.

(7) Every test vehicle or engine of an engine family must comply with all applicable standards, as determined in paragraph (b)(4)(iv) or (b)(5)(iv) and paragraph (b)(6) of this section, before any vehicle or engine in that family will be certified.

(C) [Reserved]

(2)-(6) [Reserved]

3. The following sections are added to the table of contents under Subpart N.

Subpart N—Emission Regulations for New Gasoline-Fueled and Diesel Heavy-Duty Engines; Gaseous and Particulate (Diesels Only) Exhaust Test Procedures

Sec.	
86.1301-86	Scope; applicability.
86.1302-86	Definitions.
86.1303-86	Abbreviations.
86.1304-86	Section numbering; construction.
86.1305-86	Introduction: structure of subpart.
86.1306-86	Equipment required and specifications; overview.
86.1307-86	[Reserved]
86.1308-86	Dynamometer and engine equipment specifications.
86.1309-86	Exhaust gas sampling system; gasoline-fueled engines.
86.1310-86	Exhaust gas sampling and analytical system; diesel engines.
86.1311-86	Exhaust gas analytical system; CVS bag sample.
86.1312-86	Weighing chamber (or room) and microgram balance specifications.
86.1313-86	Fuel specifications.
86.1314-86	Analytical gases.
86.1315-86	[Reserved]
86.1316-86	Calibrations; frequency and overview.
86.1317-86	[Reserved]

- 86.1318-86 Engine dynamometer calibrations.
- 86.1319-86 CVS calibration.
- 86.1320-86 Gas meter or flow instrumentation calibration, particulate measurement.
- 86.1321-86 Hydrocarbon analyzer calibration.
- 86.1322-86 Carbon monoxide analyzer calibration.
- 86.1323-86 Oxides of nitrogen analyzer calibration.
- 86.1324-86 Carbon dioxide analyzer calibration.
- 86.1325-86 [Reserved]
- 86.1326-86 Calibration of other equipment.
- 86.1327-86 Engine dynamometer test procedures; overview.
- 86.1328-86 [Reserved]
- 86.1329-86 [Reserved]
- 86.1330-86 Test sequence; general requirements.
- 86.1331-86 [Reserved]
- 86.1332-86 Engine map procedures.
- 86.1333-86 Transient test cycle generation.
- 86.1334-86 Pre-test engine and dynamometer preparation.
- 86.1335-86 Optional forced engine cool-down procedure.
- 86.1336-86 Engine starting and restarting.
- 86.1337-86 Engine dynamometer test run.
- 86.1338-86 Emission measurement accuracy.
- 86.1339-86 Diesel particulate filter handling and weighing.
- 86.1340-86 Exhaust sample analysis.
- 86.1341-86 Test cycle validation criteria.
- 86.1342-86 Calculations; exhaust emissions.
- 86.1343-86 [Reserved]
- 86.1344-86 Information required.

Subpart N—Emission Regulations for New Gasoline-Fueled and Diesel Heavy-Duty Engines; Gaseous and Particulate (Diesels Only) Exhaust Test Procedures

4. A new § 86.1301-86 is added and reads as follows:

§ 86.1301-86 Scope; applicability.

This subpart contains gaseous emission test procedures for gasoline-fueled and the gaseous and particulate emission test procedure for heavy-duty diesel engines. It applies to 1986 and late model years.

5. A new § 86.1302-86 is added and reads as follows:

§ 86.1302-86 Definitions.

The definitions in § 86.084-2 apply to this subpart.

6. A new § 86.1303-86 is added and reads as follows:

§ 86.1303-86 Abbreviations.

The abbreviations in § 86.084-3 apply to this subpart.

7. A new § 86.1304-86 is added and reads as follows:

§ 86.1304-86 Section numbering; construction.

(a) The model year of initial applicability is indicated by the section

number. The two digits following the hyphen designate the first model year for which a section is effective. A section remains effective until superseded.

Example: Section § 86.1311-86 applies to the 1986 and subsequent model years until superseded. If a section § 86.1311-86 is promulgated it would take effect beginning with the 1988 model year; § 86.1311-86 would apply to model years 1986 through 1987.

(b) A section reference without a model year suffix refers to the section applicable for the appropriate model year.

(c) Unless indicated, all provisions in this subpart apply to both gasoline-fueled and diesel heavy-duty engines.

8. A new § 86.1305-86 is added and reads as follows:

§ 8.1305-86 Introduction; structure of subpart.

(a) This subpart describes the equipment required and the procedures to follow in order to perform exhaust emission tests on gasoline-fueled and diesel heavy-duty engines. Subpart A sets forth the testing requirements and test intervals necessary to comply with EPA certification procedures.

(b) Four topics are addressed in this subpart. Sections 86.1306-86 through 86.1315-86 set forth specifications and equipment requirements; §§ 86.1316-86 through 86.1326-86 discuss calibration methods and frequency; test procedures are listed in §§ 86.1327-86 through 86.1341-86; calculation formulas are found in § 86.1342-86; data requirements are found in § 86.1344-86.

9. A new § 86.1306-86 is added and reads as follows:

§ 86.1306-86 Equipment required and specifications; overview.

This subpart contains procedures for exhaust emissions tests on diesel or gasoline-fueled heavy-duty engines. Equipment required and specifications are as follows:

(a) *Exhaust emission tests.* All engines subject to this subpart are tested for exhaust emissions. Diesel and gasoline-fueled engines are tested identically with the exception of hydrocarbon measurements; diesel engines require a heated hydrocarbon detector, § 86.1310-86. Necessary equipment and specifications appear in sections 86.1308-86 through 86.1311-86.

(b) *Fuel, analytical gas, and engine cycle specifications.* Fuel specifications for exhaust emission testing are specified in § 86.1313-86. Analytical gases are specified in § 86.3414-86. The EPA heavy-duty transient engines cycles for use in exhaust testing are described

in § 86.1333-86 and specified in Appendix I.

10. A new § 86.1307-86 is added and reserved as follows:

§ 86.1307-86 [Reserved]

11. A new § 86.1308-86 is added and reads as follows:

§ 86.1308-86 Dynamometer and engine equipment specifications.

(a) *Engine dynamometer.* The engine dynamometer system must be capable of controlling engine torque and rpm simultaneously over transient cycles. The transient torque and rpm schedules described in § 86.1333-86 and specified Appendix I (f and g) must be followed within the accuracy requirements specified in § 86.1341-86. In addition to these general requirements, the dynamometer read out and read out signals for speed and torque shall meet the following accuracy specifications:

(1) Engine speed shall be accurate to within 2 percent of point at all speeds.

(2) Engine torque at the flywheel shall be accurate to within 3 percent of point at all torque settings above 10 percent of full-scale of the torque measuring device. Below 10 percent of full-scale, the torque measuring device shall have an accuracy of:

(i) ± 2.5 ft.-lbs., if the full scale value is 550 ft.-lbs. or less.

(ii) ± 5 ft.-lbs., if the full scale value is 1050 ft.-lbs. or less.

(iii) ± 10 ft.-lbs., if the full scale value is greater than 1050 ft.-lbs.

(3) *Option:* Internal dynamometer signals (i.e., armature current, etc.) may be used for torque measurement provided that it can be shown that the true engine flywheel torque during the test cycle conforms to the test cycle values as specified in § 86.1333-86, and if the technique is approved in advance by the Administrator. The minimum requirement for the Administrator's approval would include compensation for increased or decreased flywheel torque due to the armature inertia during accelerations and decelerations in the test cycle. Engineering data and comparison test results may be required.

(b) *Cycle verification equipment.* In order to verify that the test engine has followed the test cycle correctly, the dynamometer read out signals for speed and torque must be collected in a manner that allows a statistical correlation between the actual engine performance and the test cycle (See § 86.1341-86). Normally this collection process would involve conversion of analog dynamometer signals into digital values for storage in a computer. The conversion of dynamometer read out values into values (computer or other)

that are used to evaluate the validity of engine performance in relation to the test cycle shall be performed in a manner such that:

(1) Speed values used for cycle evaluation are accurate to within 2 percent of the dynamometer speed read out value.

(2) Engine flywheel torque values used for cycle evaluation are accurate to within 3 percent of the dynamometer torque read out value.

(c) *Option:* For some systems it may be more convenient to combine the tolerances in paragraphs (a) and (b). This is permitted if the root mean square method (RMS) is used. The RMS values would then refer to accuracy in relationship to true value.

(1) Speed values used for cycle evaluation shall be accurate to within 2.8 percent of true value.

(2) Engine flywheel torque value used for cycle evaluation shall be accurate to within 4.2 percent of true value.

(d) *Speed calibration equipment.* A 60-tooth (or greater) wheel in combination with a common mode rejection frequency counter is considered an absolute standard for engine or dynamometer speed.

(e) *Torque calibration equipment.* Two techniques are allowed for torque calibration. Alternate techniques may be used if shown to be equivalent, and if prior approval is obtained from the Administrator.

(1) The lever-arm dead-weight technique involves the placement of known weights a known distance from the center of rotation of the torque measuring device. The equipment required is:

(i) *Calibration weights.* A minimum of 6 calibration weights for each range of torque measuring device used are required. The weights must be approximately equally spaced and each must be accurate to 0.5 percent of National Bureau of Standard weights. Laboratories located in foreign countries may certify calibration weights to local government bureau standards.

Certification of weight accuracy by state government Bureau of Weights and Measures is acceptable. Effects of changes in gravitational constant at the test site may be accounted for if desired.

(ii) A lever arm with a minimum length of 24 inches. The distance from the center of the engine torque measurement device to the point of weight application shall be accurate to within 0.010 inches. The arm must be balanced or the hanging torque of the arm must be known within ± 0.1 ft.-lbs.

(2) The transfer technique involves the use of a master load cell with a method of loading (usually hydraulic) the torque

measuring device, or master unit that applies a known force to the torque measuring device based on piston area and pressure. The equipment required is:

(i) A master load cell or force application unit that must be calibrated at each test weight specified in paragraph (e)(1)(i) of this section with known weights traceable to within 0.1 percent of NBS weights. The provision on traceability in (e)(1)(i) apply to this section. The overall accuracy of the calibration curve of torque applied to the engine torque sensor as determined by the master units shall be within 0.5 percent of true value. Below 10 percent of full scale of the master unit the calibration curve of torque applied to the engine torque sensor shall be accurate to:

(A) ± 0.5 ft.-lbs. of true value if full scale value is 550 ft.-lbs. or less.

(B) ± 1.0 ft.-lbs. of true value if full scale value is 1050 ft.-lbs. or less.

(C) ± 2.0 ft.-lbs. of true value if full scale value is greater than 1050 ft.-lbs.

(ii) A lever arm with a minimum length of 24 inches. The distance from the center of the engine torque measuring device to the point of force measurement or application shall be accurate to within 0.010 inches. The arm must be balanced or the hanging torque of the arm must be known within ± 0.1 ft.-lbs.

(iii) Transfer of calibration or span from a dynamometer "case" torque value to the engine flywheel torque measuring device is permitted only under static or steady state conditions.

(3) Other techniques may be used if shown to be equivalent and if approved by the Administrator.

12. A new § 86.1309-86 is added and reads as follows:

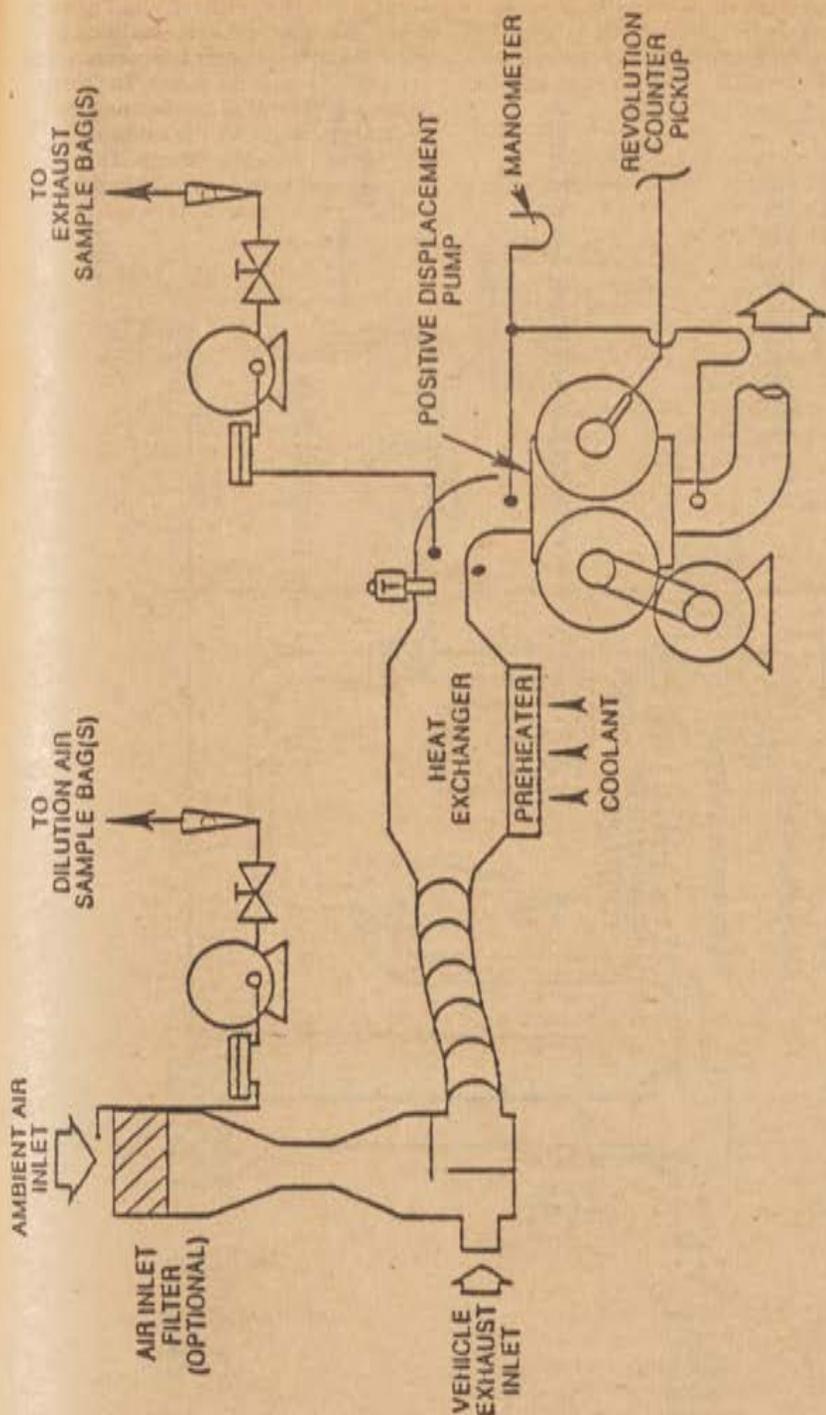
§ 86.1309-86 Exhaust gas sampling system; gasoline-fueled engines.

(a)(1) *General.* The exhaust gas sampling system is designed to measure the true mass emissions of engine exhaust. In the CVS concept of measuring mass emissions, two conditions must be satisfied: the total volume of the mixture of exhaust and dilution air must be measured, and a continuously proportioned sample of volume must be collected for analysis. Mass emissions are determined from the sample concentration and total flow over the test period. The sampling and continuous analysis system specified in § 86.1310-86 for diesel engines may be used for testing gasoline-fueled engines if the systems meet all of the requirements for such systems as specified in this Subpart.

(2) *Positive displacement pump.* The positive displacement pump—constant

volume sampler (PDP—CVS), Figure N86-1, satisfies the first condition by metering at a constant temperature and pressure through the pump. The total volume is measured by counting the revolutions made by the calibrated positive displacement pump. The proportional sample is achieved by sampling at a constant flow rate.

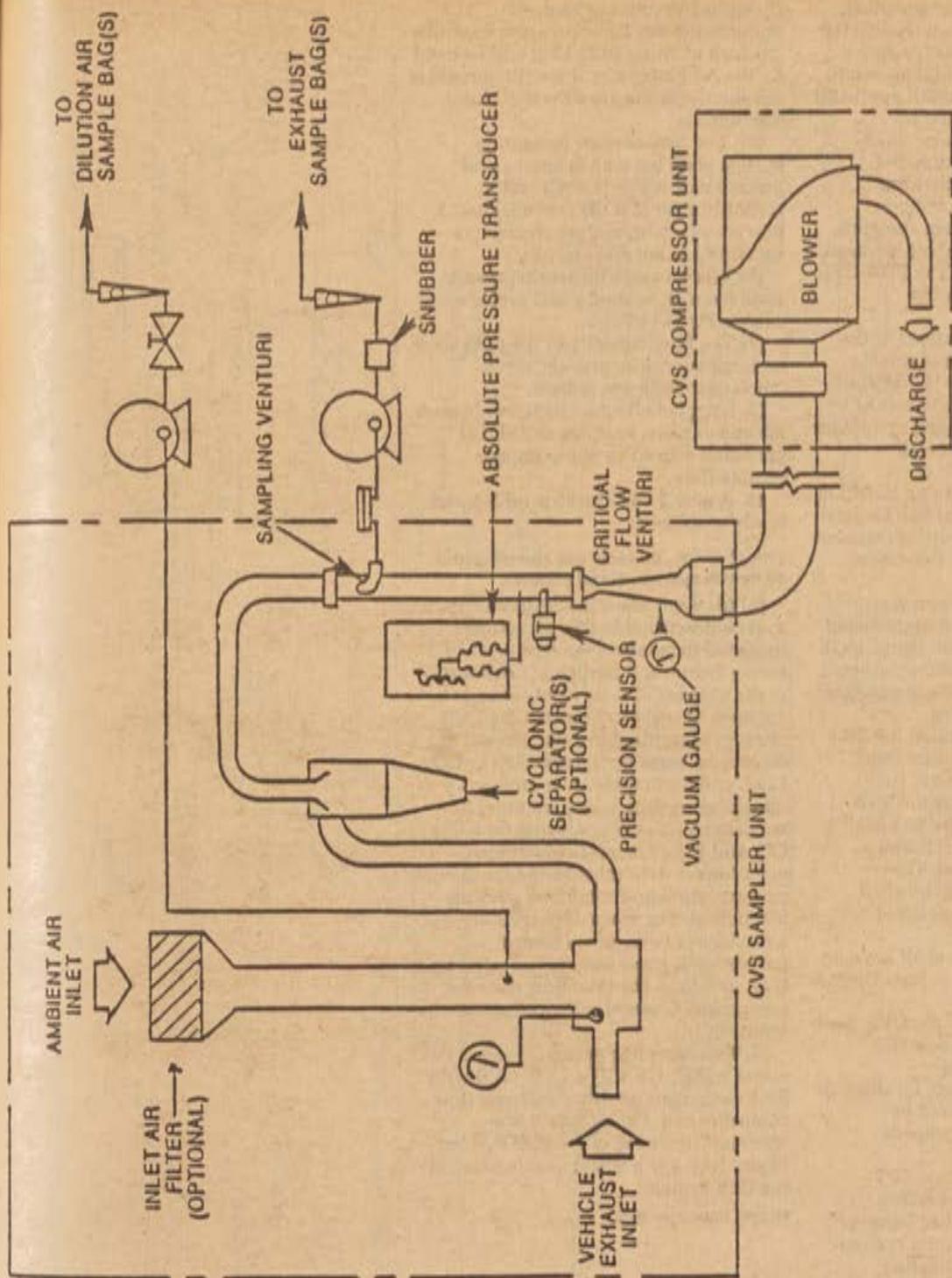
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(SEE FIG. N86-7 FOR SYMBOL LEGEND)
FIGURE N86-1 — EXHAUST GAS SAMPLING SYSTEM PDP-CVS
 FOR GASOLINE FUELED ENGINES

(3) *Critical flow venturi.* The operation of the critical flow venturi—constant volume sampler (CFV-CVS), Figure N86-2, is based upon the principles of fluid dynamics associated with critical flow. The CVF system is commonly called a constant volume system (CVS) even though the flow varies. It would be more proper to call the critical flow venturi (CFV) system a constant proportion sampling system since proportional sampling throughout temperature excursions is maintained by use of a small CFV in the sample line. The variable mixture flow rate is maintained at sonic velocity, which is inversely proportional to the square root of the gas temperature, and is computed continuously. Since the pressure and temperature are the same at both venturi inlets, the sample volume is proportional to the total volume.

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(SEE FIG. N86-7 FOR SYMBOL LEGEND)

FIGURE N86-2 — EXHAUST GAS SAMPLING SYSTEM (CFV-CVS)
FOR GASOLINE FUELED ENGINES

(4) *Other systems.* Other sampling and/or analytical systems including the systems described in § 86.1310-86 for diesel engines may be used if shown to yield equivalent results, and if approved in advance by the Administrator.

(b) *Component description, PDP-CVS.* The PDP-CVS, Figure N86-1, consists of a dilution air filter and mixing assembly, heat exchanger, positive displacement pump, sampling system, and associated valves, pressure and temperature sensors. The PDP-CVS shall conform to the following requirements:

(1) Static pressure variations at the tailpipe(s) of the engine shall remain within ± 5 inches of water (1.2 kPa) of the static pressure variations measured during a dynamometer engine cycle with no connection to the tailpipe(s).

(Sampling systems capable of maintaining the static pressure to within ± 1 inch of water (0.25 kPa) will be used by the Administrator if a written request substantiates the need for this closer tolerance.)

(2) The gas mixture temperature, measured at a point immediately ahead of the positive displacement pump, shall be within $\pm 10^\circ\text{F}$ (5.6°C) of the designed operating temperature at the start of the test. The designed operating temperature may be estimated from the average operating temperature from similar tests. The gas mixture temperature variation (after the heat exchanger) during the entire test shall be limited to $\pm 10^\circ\text{F}$ (5.6°C) from its value at the start of the test. The temperature measuring system shall have an accuracy and precision of $\pm 2^\circ\text{F}$ (1.1°C).

(3) The pressure gauges shall have an accuracy and precision of $\pm 3\text{mm Hg}$ (0.4 kPa).

(4) The flow capacity of the CVS shall be large enough to eliminate water condensation in the system.

(5) Sample collection bags for dilution air and exhaust samples shall be sufficient size so as not to impede sample flow.

(c) *Component description, CFV-CVS.* The CFV-CVS, Figure N86-2 consists of a dilution air filter (optional) and mixing assembly, optional cyclonic particulate separator(s), sampling venturi, critical flow venturi, sampling system, and assorted valves, pressure and temperature sensors.

The CFV-CVS shall conform to the following requirements:

(1) Static pressure variations at the tailpipe(s) of the vehicle shall remain within ± 5 inches of water (1.2 kPa) of the static pressure variations measured during a dynamometer engine cycle with no connection to the tailpipe(s).

(Sampling systems capable of maintaining the static pressure to within ± 1 inch of water (0.25 kPa) will be used by the Administrator if a written request substantiates the need for this closer tolerance.)

(2) The temperature measuring system shall have an accuracy and precision of $\pm 2^\circ\text{F}$ (1.1°C) and a response time of 0.100 seconds to 62.5 percent of a temperature change (as measured in hot silicone oil).

(3) The pressure measuring system shall have an accuracy and precision of $\pm 3\text{mm Hg}$ (0.4 kPa).

(4) The flow capacity of the CVS shall be large enough to prevent water condensation in the system.

(5) Sample collection bags for dilution air and exhaust samples shall be of sufficient size so as not to impede sample flow.

13. A new § 86.1310-86 is added and reads as follows:

§ 86.1310-86 Exhaust gas sampling and analytical system; diesel engines.

(a) *General.* The exhaust gas sampling system described in this paragraph is designed to measure the true mass of both gaseous and particulate emissions in the exhaust of heavy-duty diesel engines. This system utilizes the CVS concept (described in § 86.1309-86) of measuring mass emissions of NO_x , CO , CO_2 , and particulate. A continuously integrated system is required for HC measurement, and is allowed for NO_x , CO , and CO_2 . The mass of gaseous emissions is determined from the sample concentration and total flow over the test period. The mass of particulate emissions is determined from a proportional mass sample collected on a filter and from the total flow over the test period. General requirements are as follows:

(1) This sampling system requires the use of a PDP-CVS, or a CFV-CVS with heat exchanger or with electronic flow compensation. Figure N86-3 is a schematic drawing of the PDP system. Figure N86-4 is a schematic drawing of the CFV system.

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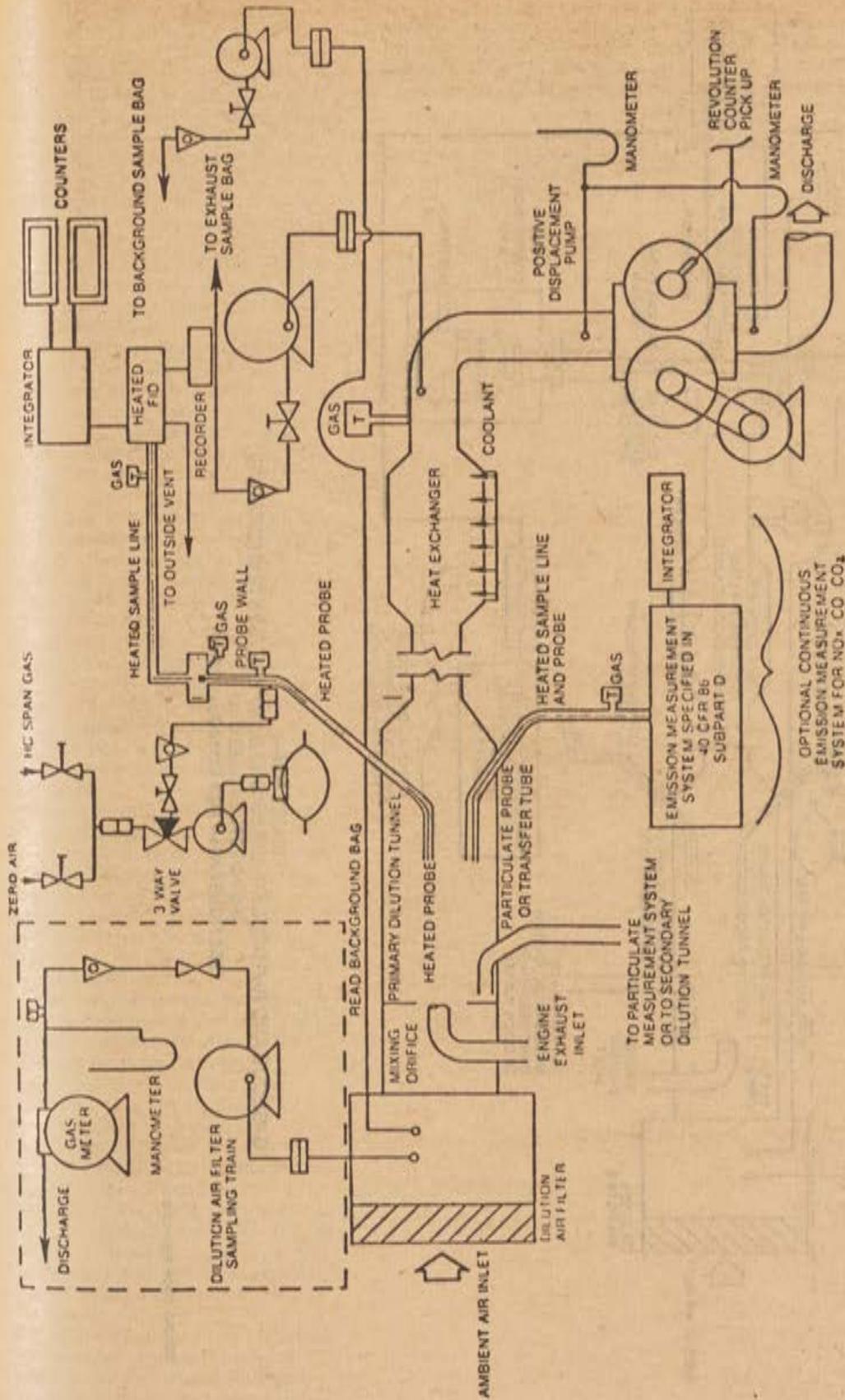


FIGURE N86-3
 GASEOUS AND PARTICULATE EMISSIONS SAMPLING SYSTEM (PDP-CVS)
 (FOR DIESEL ENGINES ONLY)
 (SEE FIGURE N86-7 FOR SYMBOL LEGEND)

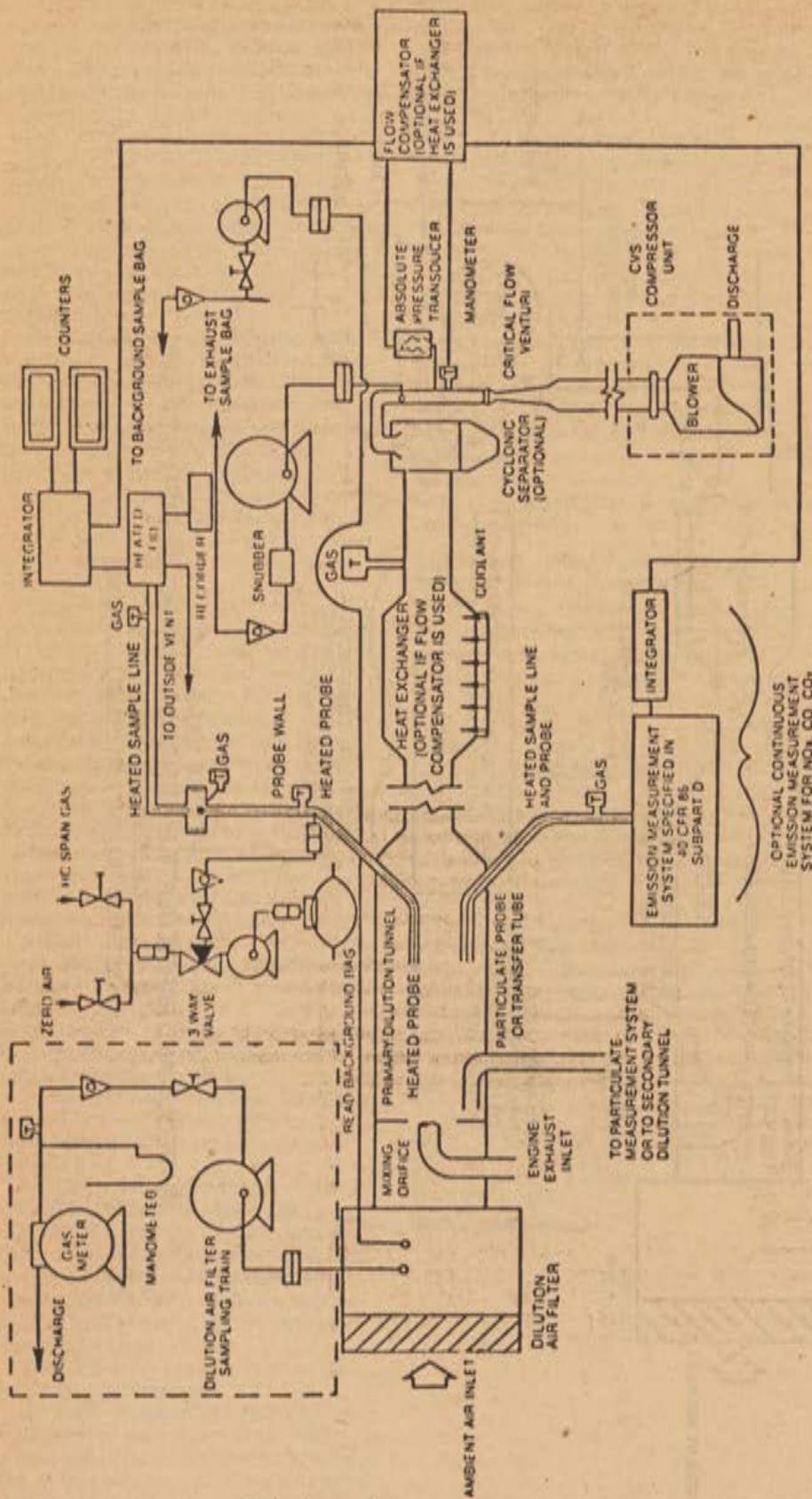


FIGURE N86-4
 GASEOUS AND PARTICULATE EMISSIONS SAMPLING SYSTEM (CFV-CVS)
 (FOR DIESEL ENGINES ONLY)
 (SEE FIGURE N86-7 FOR SYMBOL LEGEND)

(2) The HC analytical system for diesel engines requires a heated flame ionization detector (HFID) and heated sample system.

(i) The HFID sample must be taken directly from the diluted exhaust stream through a heated probe and integrated continuously over the test cycle. Unless compensation for varying flow is made, the HFID must be used with a constant flow system to insure a representative sample.

(ii) The heated probe shall be located downstream of a mixing chamber that provides a uniform sample distribution across the CVS duct.

(iii) The dilution tunnel similar to those used for diesel particulate sampling may be used as a mixing chamber for gaseous emissions also.

(3) *Option:* Continuously integrated measurement of diluted NO_x , CO, and CO_2 is permitted; however, prior approval of the Administrator is required. Test results will be required as well as engineering data and detailed system specifications to gain this approval. Minimum requirements and technical specifications are given in (b)(5) of this section.

(4) Bag sampling (§ 86.1309-86) and analytical (§ 86.1311-86) capabilities as shown in N86-3 (or Figure N86-4) are required, to provide both gaseous and particulate emissions sampling capabilities from a single system if NO_x , CO or CO_2 are not measured continuously.

(5) Since various configurations can produce equivalent results, exact conformance with these drawings is not required. Additional components such as instruments, valves, solenoids, pumps, and switches may be used to provide additional information and coordinate the functions of the component systems.

(6) Other sampling and/or analytical systems may be used if shown to yield equivalent results and if approved in advance by the Administrator.

(b) *Component description.* The components necessary for diesel exhaust sampling shall meet the following requirements:

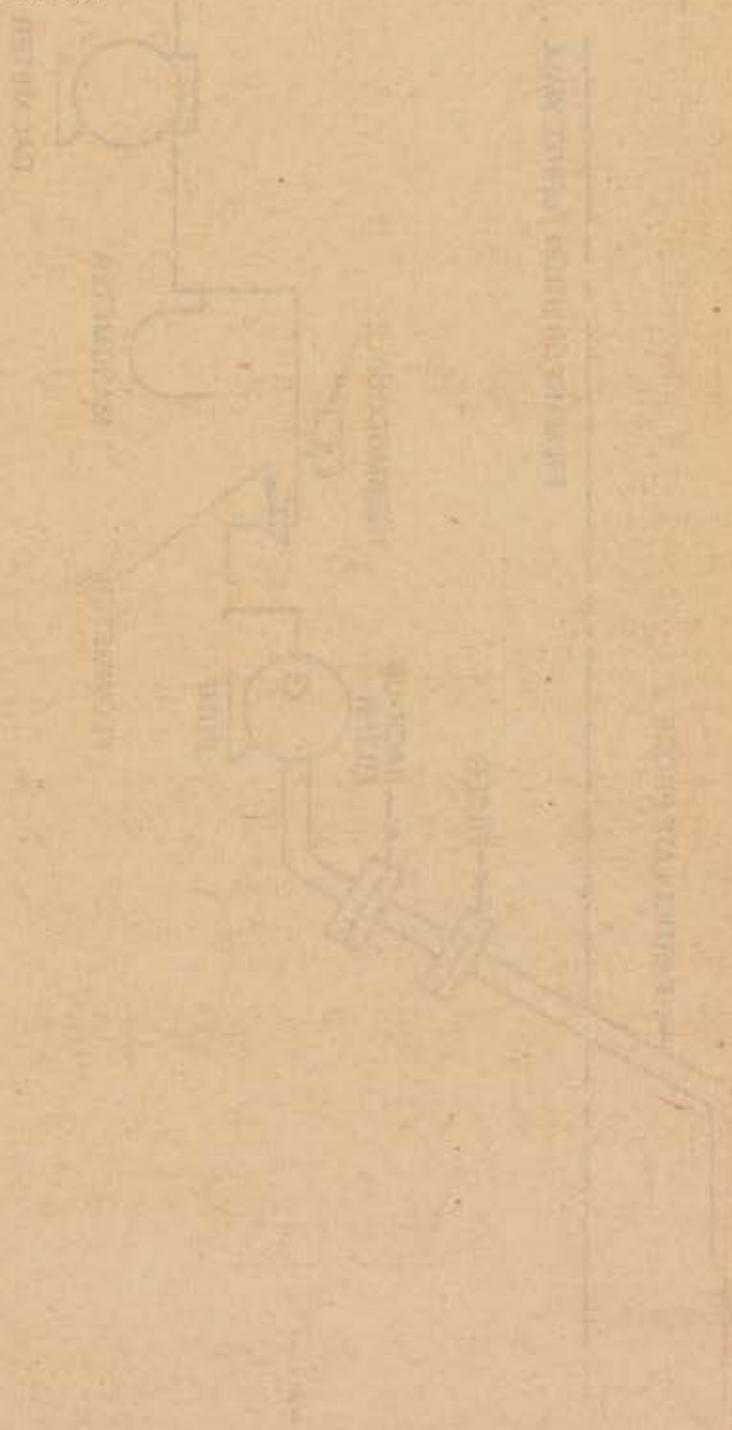
(1) The PDP-CVS, shall conform to all of the requirements listed for the exhaust gas PDP-CVS (§ 86.1309-86(b)). The CFV-CVS shall conform to all of the requirements listed for the exhaust gas CFV-CVS (§ 86.1309-86(c)). In addition, the CVS must conform to the following requirements:

(i) The flow capacity of the CVS must be sufficient to maintain the diluted exhaust stream at a temperature that will satisfactorily measure particulate and/or hydrocarbon measurements. /

This may be achieved by either of the following methods:

(A) *Single-dilution method.* A CVS of sufficient flow capacity to maintain a temperature of 125° F (51.7° C) or less at the sampling zone may be used with the primary-dilution tunnel. Direct sampling of the particulate material may then take place (Figure N86-5).

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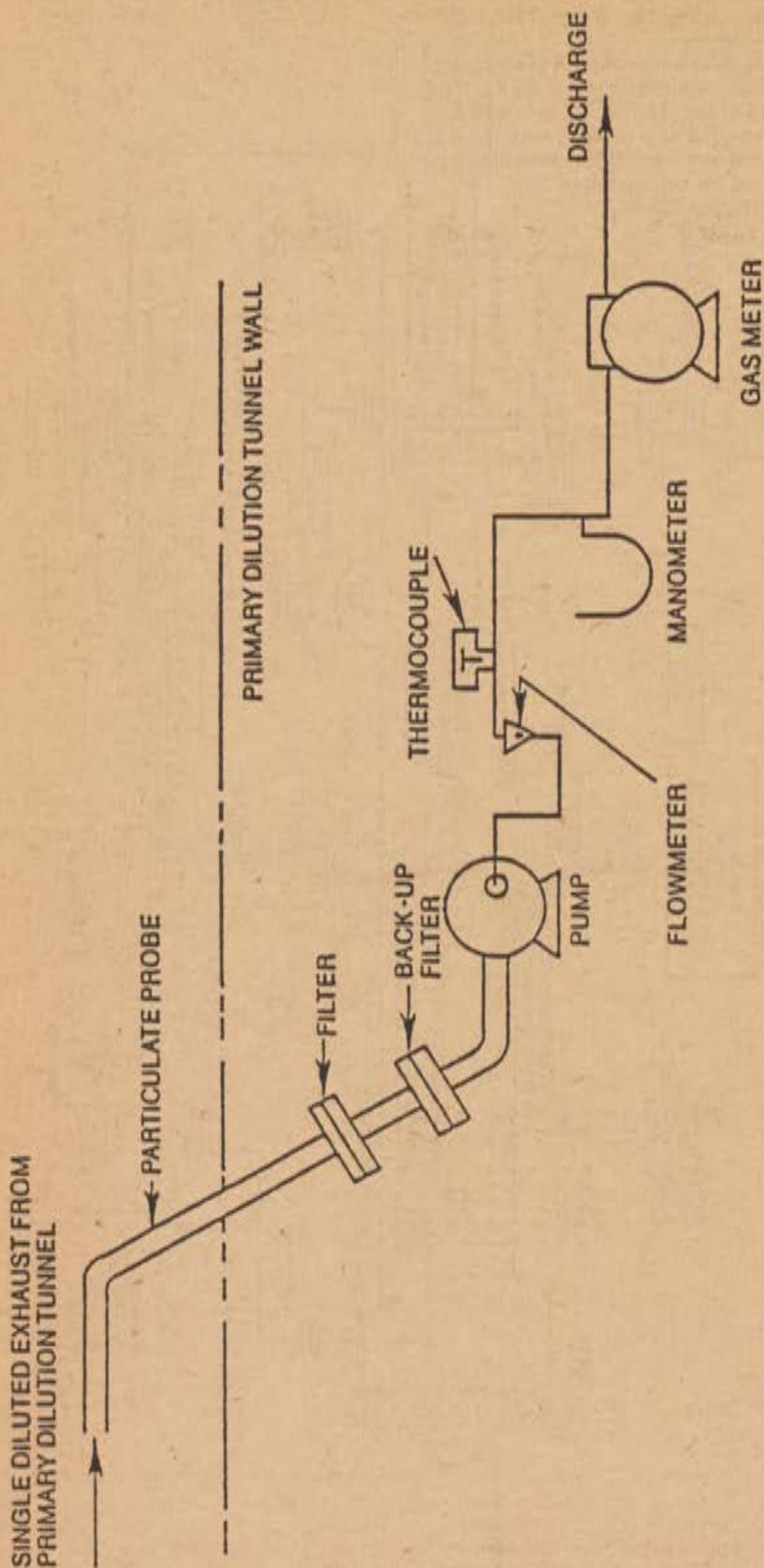


FIGURE N86-5
SINGLE DILUTION PARTICULATE MEASUREMENT SYSTEM
(FOR DIESEL ENGINES ONLY)
(SEE FIGURE N86-7 FOR SYMBOL LEGEND)

(B) *Double-dilution method.* A smaller size CVS may be used with a smaller primary-dilution tunnel (i.e., smaller than the dilution tunnel or CVS described in § 86.1310-86(b)(1)(A)), and a secondary-dilution tunnel system (Figure N86-6). The flow capacity of the CVS must be sufficient to maintain the diluted exhaust stream in the primary-dilution tunnel at a temperature of 375° F (191° C) or less at the sampling zone. The secondary dilution tunnel system must be designed to provide sufficient secondary dilution air to maintain the double diluted exhaust stream at a temperature of 125° F (51.7° C) or less immediately before the particulate filter.

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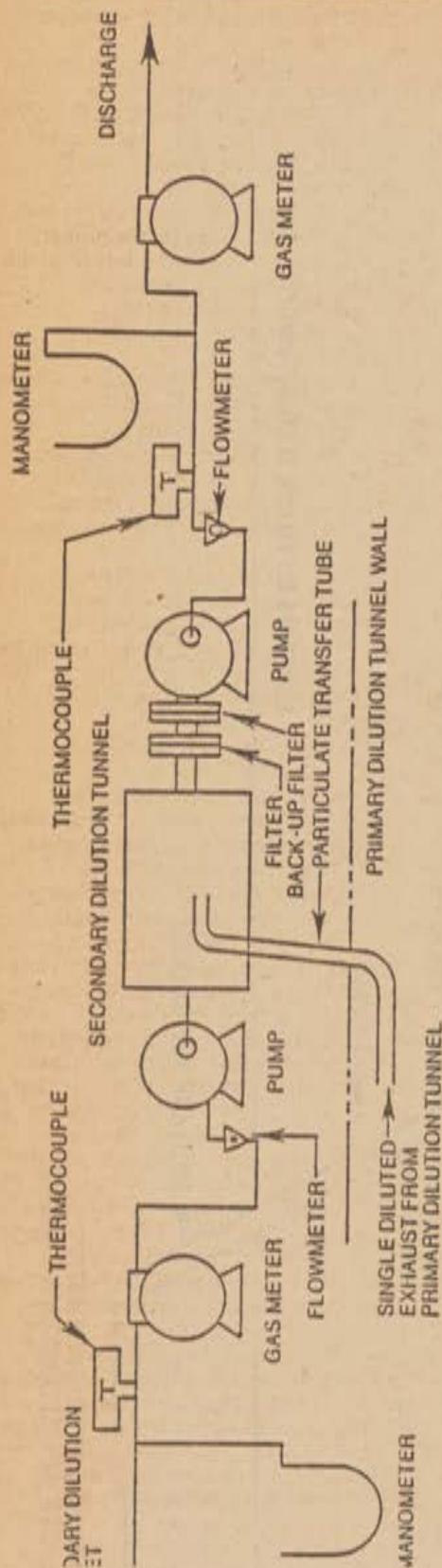


FIGURE N86-6
 DOUBLE DILUTION PARTICULATE MEASUREMENT SYSTEM
 (FOR DIESEL ENGINES ONLY)
 (SEE FIGURE N86-7 FOR SYMBOLS & LEGEND)

(ii) for the CFV-CVS, a heat exchanger or electronic flow compensation (which includes the particulate sample flows) is required (see Figure 86-4).

(iii) For the CFV-CVS, the gas mixture temperature, measured at a point immediately ahead of the critical flow venturi, shall be within $\pm 20^\circ\text{F}$ (11°C) of the designed operating temperature at the start of the test. The gas mixture temperature variation from its value at the start of the test shall be limited to $\pm 20^\circ\text{F}$ (11°C) during the entire test. The temperature measuring system shall have an accuracy and precision of $\pm 2^\circ\text{F}$ (1°C).

(2) The transfer of heat from the engine exhaust gas shall be minimized between the point where it leaves the chassis exhaust system and the point where it enters the primary-dilution tunnel airstream. To accomplish this, a short length (not more than 12 feet (3.66 m) if uninsulated, or not more than 20 feet (6.1 m), if insulated) of smooth stainless steel tubing from the muffler to the primary-dilution tunnel is required. This tubing shall have a maximum inside diameter of 6.0 inches (15.2 cm). Short sections (altogether not to exceed 20 percent of the entire tube length) of flexible tubing at connection points are allowed. If insulated, the radial thickness of the insulation must be at least R inches, where,

$R = 16(k) - 2(r)$, where
 k = Thermal conductivity of the insulating material (Btu/hr-ft²-F), and
 r = Outer radius of uninsulated tubing (inches).

(3) The engine exhaust shall be directed downstream at the point where it is introduced into the primary-dilution tunnel.

(4) The primary-dilution air shall be: (i) a temperature of $77 \pm 9^\circ\text{F}$ ($25 \pm 5^\circ\text{C}$).

(ii) Filtered at the dilution air inlet.

(5) The primary-dilution tunnel shall be:

(i) Sized to permit development of turbulent flow (Reynolds No. > 4000) and complete mixing of the exhaust and dilution air between the mixing orifice; and

(ii) At least 18 inches (43 cm) in diameter with a single-dilution system or at least 8 inches (36 cm) in diameter with a double dilution system;

(iii) Constructed of electrically conductive material which does not react with the exhaust components.

(6) The temperature of the diluted exhaust stream inside of the primary-dilution tunnel shall be sufficient to prevent water condensation.

(7) The particulate collection system must be configured in either of two basic

ways, and depends upon the dilution method used. The *single-dilution* method utilizes a system that removes a single-diluted proportional sample from the primary tunnel, and then passes this sample through the collection filter (Figure N86-5).

The *double-dilution* method utilizes a collection system that transfers a single-diluted proportional sample from the primary tunnel to a secondary-dilution tunnel where the sample is further diluted, and then passes the complete double-diluted sample through the collection filter (Figure N86-6). In this system proportional sampling is achieved by: (1) introducing the secondary dilution air at a constant mass flow rate, and (2) removing the double-diluted sample at a constant mass flow rate. The requirements for these two systems follow:

(i) *Single-dilution method.* (A) The particulate sample probe shall be:

(1) Installed facing upstream at a point where the dilution air and exhaust air are well mixed (i.e., on the primary tunnel centerline, approximately 10 tunnel diameters downstream of the point where the exhaust enters the primary dilution tunnel).

(2) Sufficiently distant (radially) from other sampling probes so as to be free from the influence of any wakes or eddies produced by the other probes.

(3) 1.27 cm (0.5 in.) minimum inside diameter.

(4) The distance from the sampling tip to the filter holder shall be at least 5 probe diameters (for filters located inside of the primary dilution tunnel), but not more than 40 inches (102 cm) for filters located outside of the primary-dilution tunnel.

(5) Designed to minimize the deposition of particulate in the probe (e.g., bends should be as gradual as possible, protrusions (due to sensors, etc.) should be smooth and not sudden, etc.).

(B) The particulate sample pump(s) shall be located sufficiently distant from the dilution tunnel so that the inlet gas temperature is maintained at a constant temperature ($\pm 5.4^\circ\text{F}$ (3°C)).

(C) The gas meters or flow instrumentation shall be located sufficiently distant from the tunnel so that the inlet gas temperature remains constant ($\pm 5^\circ\text{F}$ (2.8°C)).

(ii) *Double-dilution method.* (A) The particulate sample transfer tube shall be configured and installed so that:

(1) The inlet faces upstream in the primary-dilution tunnel at a point where the primary-dilution air and exhaust are well mixed (i.e., on the primary tunnel centerline, approximately 10 tunnel diameters downstream of the point

where the exhaust enters the primary-dilution tunnel).

(2) The exit faces downstream in the secondary-dilution tunnel.

(3) The single-diluted sample exists on the centerline of the secondary tunnel.

(B) The particulate sample transfer tube shall be:

(1) Sufficiently distant (radially) from other sampling probes (in the primary-dilution tunnel) so as to be free from the influence of any wakes or eddies produced by the other probes.

(2) 0.5 inches (1.27 cm) minimum inside diameter.

(3) No longer than 35 inches (91.4 cm) from inlet plane to exit plane.

(4) Designed to minimize the deposition of particulate during transfer (e.g., bends should be as gradual as possible protrusions (due to sensors, etc.) should be smooth and not sudden, etc.).

(5) Constructed of electrically conductive material which does not react with the exhaust components.

(C) The secondary dilution air shall be at a temperature of $77 \pm 9^\circ\text{F}$ ($25 \pm 5^\circ\text{C}$).

(D) The secondary-dilution tunnel shall be:

(1) 3.0 inches (7.62 cm) minimum inside diameter.

(2) Of sufficient length so as to provide a residence time of at least 0.25 seconds for the double-diluted sample.

(3) Constructed of electrically conductive material which does not react with the exhaust components.

(E) Additional dilution air must be provided so as to maintain temperature of 125°F (51.7°C) immediately before the sample filter. This dilution air must be introduced at a constant mass flow rate in order to maintain proportional sampling. Determination of the mass of air entering the secondary dilution tunnel is required. Introduction and measurement can be achieved by either of the following methods:

(1) A PDP-type pump flowing filtered dilution air at a constant temperature ($77 \pm 9^\circ\text{F}$ ($25 \pm 5^\circ\text{C}$)) and pressure (atmospheric is acceptable) along with a gas meter or flow instrumentation for mass determination. (See § 86.1320-86 for calibration specifics.) The gas meter or flow instrumentation shall be located so that the inlet gas temperature remains constant ($77 \pm 9^\circ\text{F}$ ($25 \pm 5^\circ\text{C}$)).

(2) A choked critical flow orifice flowing filtered dilution air. For mass determination a gas meter or other surface flow instrumentation is acceptable. (See § 86.1320-86 for calibration specifics.) The gas meter or flow instrumentation shall be located so that the inlet gas temperature remains constant ($77 \pm 9^\circ\text{F}$ ($25 \pm 5^\circ\text{C}$)).

(F) The primary filter holder shall be located within 12.0 inches (7.5 cm) of the exit of the secondary-dilution tunnel.

(G) The particulate sample pump shall be located sufficiently distant from the dilution tunnel so that the inlet gas temperature is maintained constant ($\pm 5^\circ\text{F}$ (2.8°C)).

(H) The gas meter or flow instrumentation (if double-dilution this means the downstream device) shall be located sufficiently distant from the tunnel (either primary or secondary) so that the inlet gas temperature remains constant ($\pm 5^\circ\text{F}$ ($\pm 2.8^\circ\text{C}$)).

(8) *Continuous HC measurement system.* (i) *The continuous HC sample system (as shown in Figure N86-3 or N86-4) shall be an "overflow calibration (or span) gas" type system. In this type of system, excess span or calibration gas spills out of the probe during calibration of the analyzer.*

(ii) No other analyzers may draw a sample from the continuous HC sample probe, line or system.

(iii) The span, calibration, or background sample flow rates into the sample line shall be between 190 and 210 percent of the HFID analyzer flow rate.

(iv) The span, calibration or background gases shall enter the heated sample line no farther than 4 inches from the CVS duct or dilution tunnel outside surface.

(v) The continuous hydrocarbon probe shall be:

(A) Installed in the primary dilution tunnel facing upstream at a point where the dilution air and exhaust are well mixed (i.e., approximately 10 tunnel diameters downstream of the point where the exhaust enters the dilution tunnel).

(B) Sufficiently distant (radially) from other probes so as to be free from the influence of any wakes or eddies produced by the other probes.

(C) Heated and insulated over the entire length to maintain a $375^\circ \pm 20^\circ\text{F}$ ($191^\circ \pm 11^\circ\text{C}$) wall temperature. The radial thickness of the insulation must be at least R inches, where

$R = 16(k) - 2(r)$, where
 k = Thermal conductivity of insulating material (Btu/hr-ft²-F), and
 r = Outer radius of uninsulated probe (inches).

(D) 0.5 in. (1.27 cm) minimum inside diameter.

(vi) It is intended that the total hydrocarbon probe be free from cold spots (i.e., free from spots where the probe wall temperature is less than 355°F (180°C)).

(vii) The dilute exhaust gas flowing in the total hydrocarbon sample system shall be:

(A) At $375^\circ \pm 10^\circ\text{F}$ ($191^\circ \pm 6^\circ\text{C}$) immediately before the heated filter. This gas temperature will be determined by a temperature sensor located at the exit of the heated sample line. The sensor shall have an accuracy and precision of $\pm 2^\circ\text{F}$ (1.1°C).

(B) At $375^\circ \pm 10^\circ\text{F}$ ($191^\circ \pm 6^\circ\text{C}$) immediately before HFID. This gas temperature will be determined by a temperature sensor located at the exit of the heated sample line. The sensor shall have an accuracy and precision of $\pm 2^\circ\text{F}$ (1.1°C).

(viii) It is intended that the dilute exhaust gas flowing in the total hydrocarbon sample system be between 365°F and 385°F (185°C and 197°C) gas temperature.

(ix) The response time of the continuous measurement system shall be:

(A) 1.5 seconds from an instantaneous step change at the probe entrance to the analyzer to within 95 percent of the step change.

(B) 5.5 seconds from an instantaneous step change at the entrance to the sample probe or overflow span gas port to within 95 percent of the step change.

(C) For the purpose of verification of response times, the step change shall be at least 60 percent of fullscale chart deflection.

(9) Optional continuously integrated NO_x , CO, and CO_2 measurement system.

(i) The sample probe shall:

(A) Be in the same plane as the continuous HC probe, but shall be sufficiently distant (radially) from other probes so as to be free from the influences of any wakes or eddies produced by other probes.

(B) Shall face upstream.

(C) Heated and insulated over the entire length to prevent water condensation, minimum temperature is 55°C (131°F). Sample gas temperature immediately before the first filter in the system shall be at least 55°C (131°F).

(ii) The continuous NO_x , CO, or CO_2 sampling and analysis system shall conform to the specifications of 40 CFR 86, Subpart D with the following exceptions and revisions:

(A) The system components required to be heated by Subpart D need only be heated to prevent water condensation, the minimum temperature allowed is 55°C (131°F).

(B) The system response defined in § 86.329-79 shall be no greater than 5.5 seconds. Longer response time may be allowed if analysis system response time is coordinated with CVS flow fluctuations, is shown to be equivalent to the 5.5 second system, and if prior approval is granted by the Administrator.

(C) Alternative NO_x measurement techniques outlined in § 86.346-79 are not permitted for NO_x measurement in this Subpart.

(D) All analytical gases shall conform to the specifications of § 86.1314-86.

(E) Any range on a linear analyzer below 155 ppm shall have and use a calibration curve conforming to § 86.330-79.

(F) The measurement accuracy requirements specified in § 86.338-79 are superseded by those specified in § 86.1338-86.

(iii) The chart deflections of analyzers with non-linear calibration curves shall be converted to concentration values by the calibration curve(s) specified in Subpart D (86.330-79) before flow correction (if used) and subsequent integration takes place.

(c) *Filters, particulate sampling.*—(1) *Filter acceptance criteria.* Valid diesel particulate net filter weights shall be accepted according to the following criteria:

(i) During the cold start phase of the heavy-duty transient cycle and again during the hot start phase of the heavy-duty transient cycle dilute exhaust will be simultaneously sampled by paired primary test and back-up test filters.

(ii) The back-up filter holder shall be located 3 to 4 inches downstream of the primary filter holder.

(iii) The net weight of particulate material collected on each primary test filter and each back-up test filter shall be determined by the procedure outlined in § 86.1339-85.

(iv) A ratio of net weights will be determined by the following formula:

(Mass Particulate)_{Test filter}

Ratio of net weights = $\frac{\text{(Mass Particulate)}_{\text{Test filter}}}{\text{(Mass Particulate)}_{\text{Test filter}} + \text{(Mass Particulate)}_{\text{Back-up filter}}}$

(v) If the ratio is greater than 0.95, then particulate emissions calculations are based on the net weight of the primary filter only.

(vi) If the ratio is less than 0.95, then particulate emissions calculations are based on the combined net weights of the back-up filter and the primary test filter.

(2) The particulate filter must have a minimum 70 mm diameter (60 mm stain area). Larger diameter filters are also acceptable. (Larger diameter filters may be desirable in order to reduce the pressure drop across the filter when testing vehicles which produce large amounts of particulate.)

(3) The recommended minimum loading on the 70 mm filter is 5.3 milligrams. Equivalent loadings (ie., mass/stain area) are recommended for larger filters. For equivalency calculations assume the 70 mm loading has a 60 mm stain diameter.

(4) Fluorocarbon coated glass fiber filters or fluorocarbon based (membrane) filters are required for particulate collection.

14. A new § 86.1311-86 is added and reads:

§ 86.1311-86 Exhaust gas analytical system. CVS bag sample.

(a) *Schematic drawings.* Figure N86-7 is a schematic drawing of the exhaust gas analytical system used for analyzing CVS bag samples from either gasoline-fueled or diesel engines. The schematic of the hydrocarbon analysis train for diesel engines is shown as part of Figure N86-3 or N86-4. Since various configurations can produce accurate results, exact conformance with the drawing is not required. Additional components such as instruments, valves, solenoids, pumps and switches may be used to provide additional information and coordinate the functions of the component systems.

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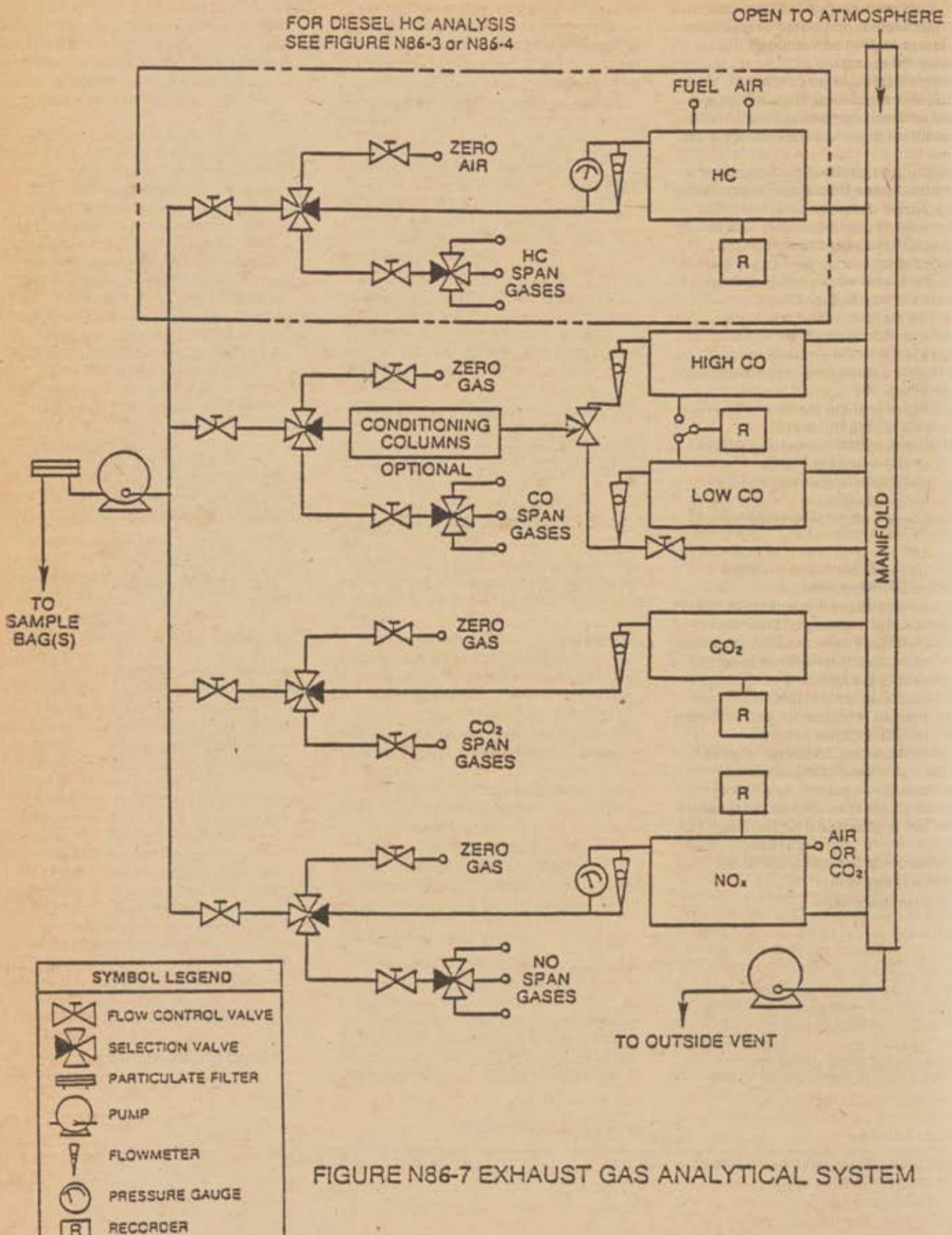


FIGURE N86-7 EXHAUST GAS ANALYTICAL SYSTEM

(b) *Major component description.* The analytical system, Figure N86-7, consists of a flame ionization detector (FID) for the determination of hydrocarbons, nondispersive infrared analyzers (NDIR) for the determination of carbon monoxide and carbon dioxide and a chemiluminescence analyzer (CL) for the determination of oxides of nitrogen. A heated flame ionization detector (HFID) is used for the continuous determination of hydrocarbons from diesel engines, Figure N86-3 or N86-4.

The exhaust gas analytical system shall conform to the following requirements:

(1) The CL requires that the nitrogen dioxide present in the sample be converted to nitric oxide before analysis. Other types of analyzers may be used if shown to yield equivalent results and if approved in advance by the Administrator.

(2) The carbon monoxide (NDIR) analyzer may require a sample conditioning column containing CASO₂ or indicating silica gel to remove water vapor and containing ascarite to remove carbon dioxide from the CO analysis stream.

(i) If CO instruments are used which are essentially free of CO₂ and water vapor interference, the use of the conditioning column may be deleted. (See § 86.1322-86 and § 86.1342-86.)

(ii) A CO instrument will be considered to be essentially free of CO₂ and water vapor interference if its response to a mixture of 3 percent CO₂ in N₂ which has been bubbled through water at room temperature produces an equivalent CO response, as measured on the most sensitive CO range, which is less than 1 percent of full scale CO concentration on ranges above 300 ppm full scale or less than 3 ppm on ranges below 300 ppm full scale. (See § 86.1322-86.)

(c) *Alternate analytical systems.* Analysis systems meeting the specifications of 40 CFR 86, Subpart D may be used for testing this Subpart (N) with the exception of §§ 86.346-86 and 86.347-86, provided that the Subpart D systems meet the specifications of this Subpart. Heated analyzers may be used in their heated configuration.

(d) *Other analyzers and equipment.* Other types of analyzers and equipment may be used if shown to yield equivalent results and if approved in advance by the Administrator.

15. A new § 86.1312-86 is added and reads as follows:

§ 86.1312-86 Weighing chamber (or room) and microgram balance specifications.

(a) *Ambient conditions.—*(1) *Temperature.* The temperature of the

chamber in which the particulate filters are conditioned and weighed shall be maintained to within $\pm 10^\circ$ F (6° C) of a set point between 68° F (20° C) and 86° F (30° C) during all filter conditioning and filter weighing.

(2) *Humidity.* The relative humidity of the chamber in which the particulate filters are conditioned and weighed shall be maintained to within ± 10 percent of a set point between 30 and 70 percent during all filter conditioning and filter weighing.

(3) The environment shall be free from any ambient contaminants (such as dust) that would settle on the particulate filters during their stabilization. It is required that two reference filters remain in the weighing room at all times, and that these filters be weighed at the beginning and end of each conditioning period. If the weight of either or both of these two reference filters changes by more than ± 1.0 percent of the nominal filter loading (a minimum of 5.3 milligrams, if possible) during the conditioning period, then all filters in the process of being stabilized should be discarded, and any tests repeated. The reference filters shall be changed at least once per month.

(b) *Microgram balance specifications.* The microgram balance used to determine the weights of all filters shall have an accuracy and a readability of one microgram.

16. A new § 86.1313-86 is added and reads as follows:

§ 86.1313-86 Fuel specifications.

(a) *Gasoline.* (1) Gasoline having the following specifications will be used by the Administrator in exhaust emission testing. Gasoline having the following specifications or substantially equivalent specifications approved by the Administrator, shall be used by the manufacturer in exhaust testing, except that the lead and octane specifications do not apply.

Item	ASTM	Leaded	Unleaded
Octane, research, minimum	D2699	88	89
Pb. (organic), gm/ U.S. gallon		1.4	0.00-0.05
Distillation range:			
IBP, °F	D86	75-95	75-95
10 percent point, °F	D86	120-135	120-135
50 percent point, °F	D86	200-230	200-230
90 percent point, °F	D86	300-325	300-325
EP, °F (maximum)	D86	415	415
Sulphur, weight percent, (max.)	D1266	0.10	0.10
Phosphorus, gm/ U.S. gallon (max.)		0.01	0.005
RVP, psi	D323	8.7-9.2	8.7-9.2

Item	ASTM	Leaded	Unleaded
Hydrocarbon composition:			
Olefins, percent, (max.)	D1319	10	10
Aeromatics, percent (max.)	D1319	35	35
Saturates	D1319	(*)	(*)

* Minimum.
* Remainder.

(2) Gasoline representative of commercial gasoline which will be generally available through retail outlets shall be used in service accumulation. For leaded gasoline the minimum lead content shall be 1.4 grams per U.S. gallon, except that where the Administrator determines that vehicles represented by a test vehicle will be operated using gasoline of different lead content than that prescribed in this paragraph, he may consent in writing to use of a gasoline with a different lead content. The octane rating of the gasoline used shall be not higher than 1.0 Research octane number above the minimum recommended by the manufacturer and have a minimum sensitivity of 7.5 octane numbers, where sensitivity is defined as the Research octane number minus the Motor octane number. The Reid Vapor Pressure of the gasoline used shall be characteristic of the motor fuel used during the season in which the service accumulation takes place.

(3) The specification range of the gasoline to be used under paragraph (a)(2) of this section shall be reported in accordance with § 86.084-21(b)(3).

(b) *Diesel fuel.* (1) The diesel fuels employed for testing shall be clean and bright, with pour and cloud points adequate for operability. The diesel fuel may contain nonmetallic additives as follows: Cetane improver, metal deactivator, antioxidant, dehazer, antirust, pour depressant, dye, and dispersant.

(2) Diesel fuel meeting the following specifications, or substantially equivalent specifications approved by the Administrator, shall be used in exhaust emissions testing. The grade of diesel fuel recommended by the engine manufacturer commercially designated as "Type 1-D" or "Type 2-D" grade diesel fuel shall be used.

Item	ASTM	Type 1-D	Type 2-D
Cetane	D613	48-54	42-50
Distillation range:			
IBP °F	D86	330-390	340-400
10 percent point, °F	D86	370-430	400-460
50 percent point, °F	D86	410-480	470-540

Item	ASTM	Type 1-D	Type 2-D
90 percent point, °F	D66	460-520	550-610
EP, °F	D66	500-560	580-660
Gravity, °API	D287	40-44	33-37
Total Sulfur, percent	D129 or D2622	0.05-0.20	0.2-0.5
Hydrocarbon composition:			
Aromatics, percent	D1319	18	127
Paraffins	D1319	(1)	(1)
Naphthenes, Olefins			
Flashpoint, °F (minimum)	D93	120	130
Viscosity, centistokes	D445	1.6-2.0	2.0-3.2

¹ Minimum.
² Remainder.

(3) Diesel fuel meeting the following specifications, or substantially equivalent specifications approved by the Administrator, shall be used in service accumulation. The grade of diesel fuel recommended by the engine manufacturer, commercially designated as "Type 1-D" or "Type 2-D" grade diesel fuel shall be used.

Item	ASTM	Type 1-D	Type 2-D
Cetane (minimum)	D613	42-56	30-58
Distillation range: 90 percent point, °F	D86	440-530	540-630
Gravity °APM	D287	39-45	30-42
Total sulfur, percent (minimum)	D129 or D2622	0.05	0.2
Flashpoint, °F (minimum)	D93	120	130
Viscosity, centistokes	D455	1.2-2.2	1.5-4.5

¹ Minimum.

(4) Other petroleum distillate fuels may be used for testing and service accumulation provided they are:
(i) Commercially available;
(ii) Information, acceptable to the Administrator, is provided to show that only the designated fuel would be used in customer service;
(iii) Use of a fuel listed under paragraphs(b)(2) and (b)(3) of this section would have a detrimental effect on emissions or durability;
(iv) Written approval from the Administrator of the fuel specifications must be provided prior to the start of testing.
(5) The specification range of the fuels to be used under paragraphs (b)(2), (b)(3), and (b)(4) of this section shall be reported in accordance with § 86.084-21(b)(3).

17. A new § 86.1314-86 is added and reads as follows:

§ 86.1314-86 Analytical gases.

(a) Gases for the CO and CO₂ analyzers shall be single blends of CO and CO₂ respectively using nitrogen as the diluent.

(b) Gases for the hydrocarbon analyzer shall be single blends of propane using air as the diluent.

(c) Gases for the NO_x analyzer shall be single blends of NO named as NO_x with a maximum NO₂ concentration of 5 percent of the nominal value using nitrogen as the diluent.

(d) Fuel for the FID shall be a blend of 40±2 percent hydrogen with the balance being helium. The mixture shall contain less than 1 ppm equivalent carbon response. 98 to 100 percent hydrogen fuel may be used with advance approval of the Administrator.

(e) The allowable zero gas (air or nitrogen) impurity concentrations shall not exceed 1 ppm equivalent carbon response, 1 ppm carbon monoxide, 0.04 percent (400 ppm) carbon dioxide and 0.1 ppm nitric oxide.

(f)(1) "Zero-grade air" includes artificial "air" consisting of a blend of nitrogen and oxygen with oxygen concentrations between 18 and 21 mole percent.

(2) Calibration gases shall be traceable to within 1 percent of NBS gas standards, or other gas standards which have been approved by the Administrator.

(3) Span gases shall be accurate to within 2 percent of true concentration, where true concentration refers to NBS gas standards, or other gas standards which have been approved by the Administrator.

(g) The use of proportioning and precision blending devices to obtain the required gas concentrations is allowable provided their use has been approved in advance by the Administrator.

18. A new § 86.1315-86 is added and reads as follows:

§ 86.1315-86 [Reserved]

19. A new § 86.1316-86 is added and reads as follows:

§ 86.1316-86 Calibrations; frequency and overview.

(a) Calibrations shall be performed as specified in §§ 86.1318-86 through 86.1326-86.

(b) At least monthly or after any maintenance which could alter calibration, the following calibrations and checks shall be performed:

(1) Calibrate the hydrocarbon analyzer, carbon dioxide analyzer, carbon monoxide analyzer, and oxides of nitrogen analyzer.

(2) Calibrate the engine dynamometer flywheel torque and speed measurement transducers.

(3) Calibrate the engine flywheel torque and speed feedback signals.

(c) At least weekly or after any maintenance which could alter

calibration, the following calibrations and checks shall be performed:

(1) Check the oxides of nitrogen converter efficiency, and;
(2) Perform a CVS system verification.

(d) The CVS positive displacement pump or critical flow venturi shall be calibrated following initial installation, major maintenance or as necessary when indicated by the CVS system verification (described in § 86.1319-86).

(e) Sample conditioning columns, if used in the CO analyzer train, should be checked at a frequency consistent with observed column life or when the indicator of the column packing begins to show deterioration.

20. A new § 86.1317-86 is added and reserved as follows:

§ 86.1317-86 [Reserved]

21. A new § 86.1318-86 is added and reads as follows:

§ 86.1318-86 Engine dynamometer system calibration.

(a) The engine flywheel torque and engine speed measurement transducers shall be calibrated at least once each month with the calibration equipment described in § 86.1308-86.

(b) The engine flywheel torque and speed feedback signal shall be calibrated at least once each month.

(c) Other engine dynamometer system calibrations shall be performed as dictated by good engineering practice and manufacturer's recommendations.

(d) When calibrating the engine flywheel torque transducer, any lever arm used to convert a weight or a force through a distance into a torque shall be used in a horizontal position (±5 degrees).

(e) Calibrated resistors may not be used for engine flywheel torque transducer calibration, but may be used to span the transducer prior to engine testing.

22. A new § 86.1319-86 is added and reads as follows:

§ 86.1319-86 CVS calibration.

(a) The CVS is calibrated using an accurate flowmeter and restrictor valve. The calibrated accuracy of the flowmeter shall be traceable to the National Bureau of Standards to within 1 percent of the true flow value. (Note: In no case should an upstream screen or other restriction which can effect the flow be used ahead of the flowmeter unless calibrated throughout the flow range with such a device.) The CVS calibration procedures are designed for use of a "metering venturi" type flowmeter. Properly calibrated large radius or ASME flow nozzles are considered equivalent if traceable to

NBS measurements. Other measurement systems may be used if shown to be equivalent under the test conditions in this action and if approved by the Administrator. Measurements of the various flowmeter parameters are recorded and related to flow through the CVS. Procedures used by EPA for both PDP- and CFV-CVS's are outlined below. Other procedures yielding equivalent results may be used if approved in advance by the Administrator.

(b) After the calibration curve has been obtained, verification of the entire system may be performed by injecting a known mass of gas into the system and comparing the mass indicated by the system to the true mass injected. An indicated error does not necessarily mean that the calibration is wrong, since other factors can influence the accuracy of the system, e.g. analyzer calibration or HC hangup. A verification procedure is found in paragraph (e) of this section.

(c) *PDP calibration.* (1) The following calibration procedure outlines the equipment, the test configuration, and the various parameters which must be measured to establish the flow rate of the CVS pump.

(i) All the parameters related to the pump are simultaneously measured with the parameters related to a flowmeter which is connected in series with the pump.

(ii) The calculated flow rate $ft^3/min.$, (at pump inlet absolute pressure and temperature) can then be plotted versus a correlation function which is the value of a specific combination of pump parameters.

(iii) The linear equation which relates the pumpflow and the correlation function is then determined.

(iv) In the event that a CVS has a multiple speed drive, a calibration for each range used must be performed.

(2) This calibration procedure is based on the measurement of the absolute values of the pump and flowmeter parameters that relate the flow rate at each point. Three conditions must be maintained to assure the accuracy and integrity of the calibration curve:

(i) The pump pressures should be measured at taps on the pump rather than at the external piping on the pump inlet and outlet. (Pressure taps that are mounted at the top center and bottom center of the pump drive headplate are exposed to the actual pump cavity pressure, and therefore reflect the absolute pressure differentials.)

(ii) The temperature stability must be maintained during calibration. (Flowmeters are sensitive to inlet temperature oscillations which cause

the data points to be scattered. Gradual changes in temperature are acceptable as long as they occur over a period of several minutes.)

(iii) All connections between the flowmeter and the CVS pump must be absolutely void of any leakage.

(3) During an exhaust emission test the measurement of these same pump parameters enables the user to calculate the flow rate from the calibration equation.

(4) Connect a system as shown in Figure N86-8. Although particular types of equipment are shown, other configurations that yield equivalent results may be used if approved in advance by the Administrator. For the system indicated, the following data with given accuracy are required:

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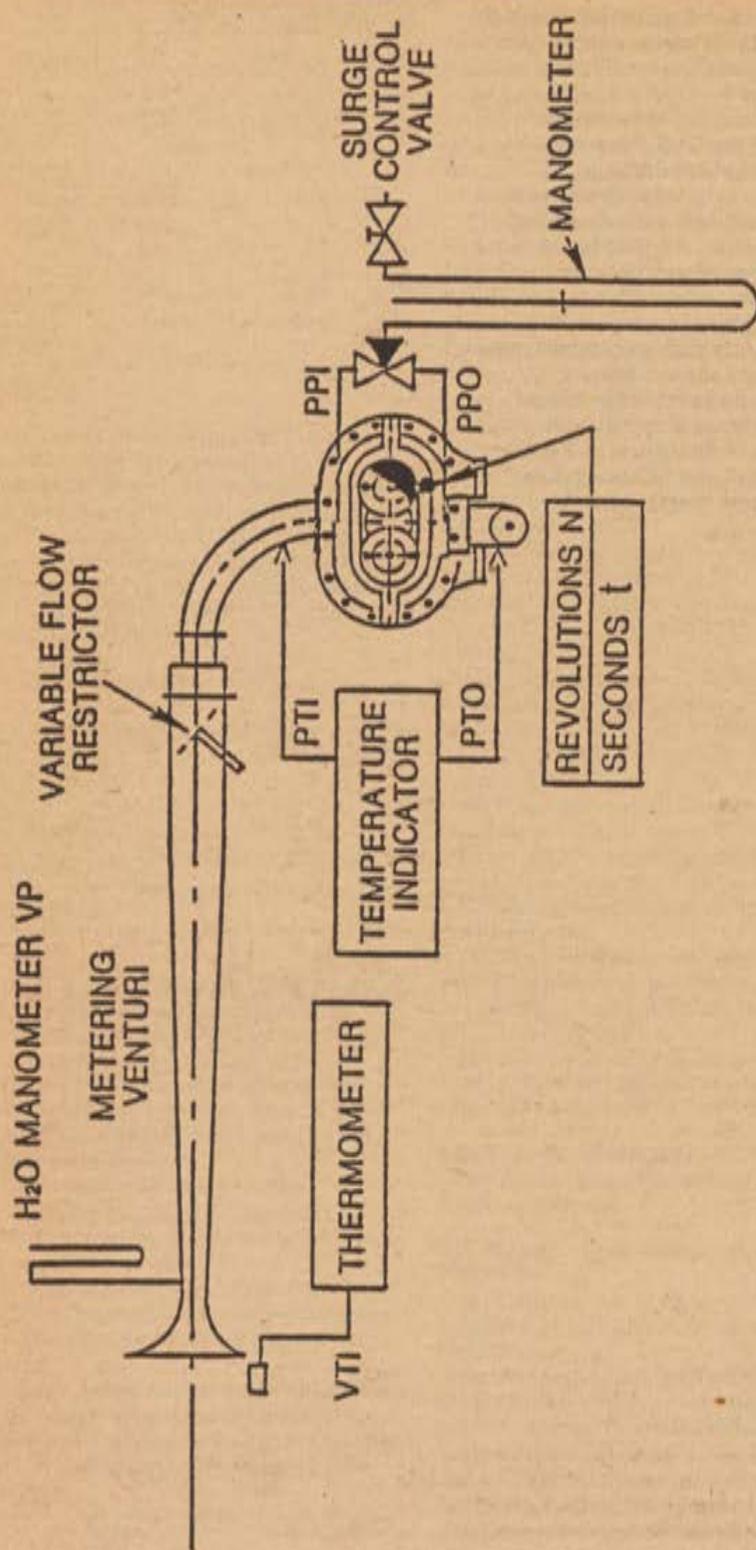


FIGURE N86-8 — PDP-CVS CALIBRATION CONFIGURATION

Calibration Data Measurements

Parameter	Symbol	Units	Tolerances
Barometric pressure (corrected)	P_b	In. Hg (kPa)	± 0.1 in. Hg (± 0.034 kPa)
Ambient temperature	T_a	$^{\circ}\text{F}$ ($^{\circ}\text{C}$)	$\pm 5^{\circ}\text{F}$ ($\pm 28^{\circ}\text{C}$)
Air temperature into SFV	ETI	$^{\circ}\text{F}$ ($^{\circ}\text{C}$)	$\pm 50^{\circ}\text{F}$ ($\pm 28^{\circ}\text{C}$)
Pressure drop between SFV inlet and throat	EDP	In. H ₂ O (kPa)	± 0.05 in. H ₂ O (± 0.012 kPa)
Air temperature at CVS pump inlet	PTI	$^{\circ}\text{F}$ ($^{\circ}\text{C}$)	$\pm 5^{\circ}\text{F}$ ($\pm 28^{\circ}\text{C}$)
Pressure depression at CVS pump inlet	PPI	In. fluid (kPa)	± 0.05 in. fluid (± 0.022 kPa)
Specific gravity of manometer fluid (1.75 oil)	Sp. G		
Pressure head at CVS pump outlet	PPO	In. fluid (kPa)	± 0.05 in. fluid (± 0.022 kPa)
Air Temperature at CVS pump outlet (optional)	PTO	$^{\circ}\text{F}$ ($^{\circ}\text{C}$)	$\pm 5^{\circ}\text{F}$ ($\pm 28^{\circ}\text{C}$)
Pump revolutions during test period	N	Revs	± 1 Rev.
Elapsed time for test period	t	s	± 0.5 s.

(5) After the system has been connected as shown in Figure N86-8, set the variable restrictor in the wide open position and run the CVS pump for 20 minutes. Record the calibration data.

(6) Reset the restrictor valve to a more restricted condition in an increment of pump inlet depression that will yield a minimum of six data points for the total calibration. Allow the system to stabilize for 3 minutes and repeat the data acquisition.

(7) Data analysis: (i) The air flow rate, Q_s , at each test point is calculated in standard cubic feet per minute (68 $^{\circ}$ F, 29.92 in. Hg) from the flowmeter data using the manufacturer's prescribed method.

(ii) The air flow rate is then converted to pump flow, V_o , in cubic feet per revolution at absolute pump inlet temperature and pressure.

$$V_o = \frac{Q_s}{n} \times \frac{T_p}{528} \times \frac{29.92}{P}$$

Where:

V_o = Pump flow, ft³/revolution (m³/revolution) at T_p , P_p .

Q_s = Meter air flow rate in standard cubic feet per minute, standard conditions are 68 $^{\circ}$ F, 29.92 in. Hg (20 $^{\circ}$ C, 101.3 kPa).

n = Pump speed in revolutions per minute.

T = Pump inlet temperature R(K)

P = $PTI + 460$ ($^{\circ}\text{R}$), or = $PTI + 273$ ($^{\circ}\text{K}$)

P = Absolute pump inlet pressure, in. Hg (kPa)

$P = P - PPI$ (Sp. Gr./13.57) for SI units.

$P_o = P_b - PPI$

Where:

P_b = barometric pressure, in. Hg (kPa).

PPI = Pump inlet depression, in. fluid (kPa).

Sp. Gr. = Specific gravity of manometer fluid relative to water.

(iii) The correlation function at each test point is then calculated from the calibration data.

$$x_o = \frac{1}{n} \sqrt{\frac{P_p}{P_e}}$$

Where:

x_o = correlation function.

ΔP_p = The pressure differential from pump inlet to pump outlet, in. Hg (kPa).

$= P_e - P_p$

P_e = Absolute pump outlet pressure, in. Hg (kPa)

$= P_b + PPO$ (Sp. Gr./13.57) for SI units,

$P_e = P_b + PPO$

(d) CFV calibration. (1) Calibration of the CFV is based upon the flow equation for a critical venturi. Gas flow is a function of inlet pressure and temperature:

$$Q_s = \frac{K_v P}{\sqrt{T}}$$

Where:

Q_s = flow,

K_v = calibration coefficient,

P = absolute pressure,

T = absolute temperature.

The calibration procedure described below establishes the value of the calibration coefficient at measured values of pressure, temperature and air flow.

(2) The manufacturer's recommended procedure shall be followed for calibrating electronic portions of the CFV.

(3) Measurements necessary for flow calibration are as follows:

Calibration Data Measurements

Parameter	Symbol	Units	Tolerances
Barometric Pressure (corrected)	P_b	In. Hg (kPa)	± 0.1 in. Hg (± 0.034 kPa)
Air temperature, flowmeter	ETI	$^{\circ}\text{F}$ ($^{\circ}\text{C}$)	$\pm 50^{\circ}\text{F}$ ($\pm 28^{\circ}\text{C}$)
Pressure drop between SFV inlet and throat	EDP	In. H ₂ O (kPa)	± 0.05 in. H ₂ O (± 0.012 kPa)
Air flow	Q_s	ft ³ /min. (m ³ /min.)	$\pm 5\%$
CFV inlet depression	PPI	In. fluid (kPa)	± 0.05 in. fluid (± 0.022 kPa)
Temperature at venturi inlet	T_p	$^{\circ}\text{F}$ ($^{\circ}\text{C}$)	$\pm 5^{\circ}\text{F}$ ($\pm 28^{\circ}\text{C}$)
Specific gravity of manometer fluid (1.75 oil)	Sp. Gr		

(4) Set up equipment as shown in Figure N86-9 and check for leaks. Any leaks between the flow measuring devices and the critical flow venturi will seriously affect the accuracy of the calibration.

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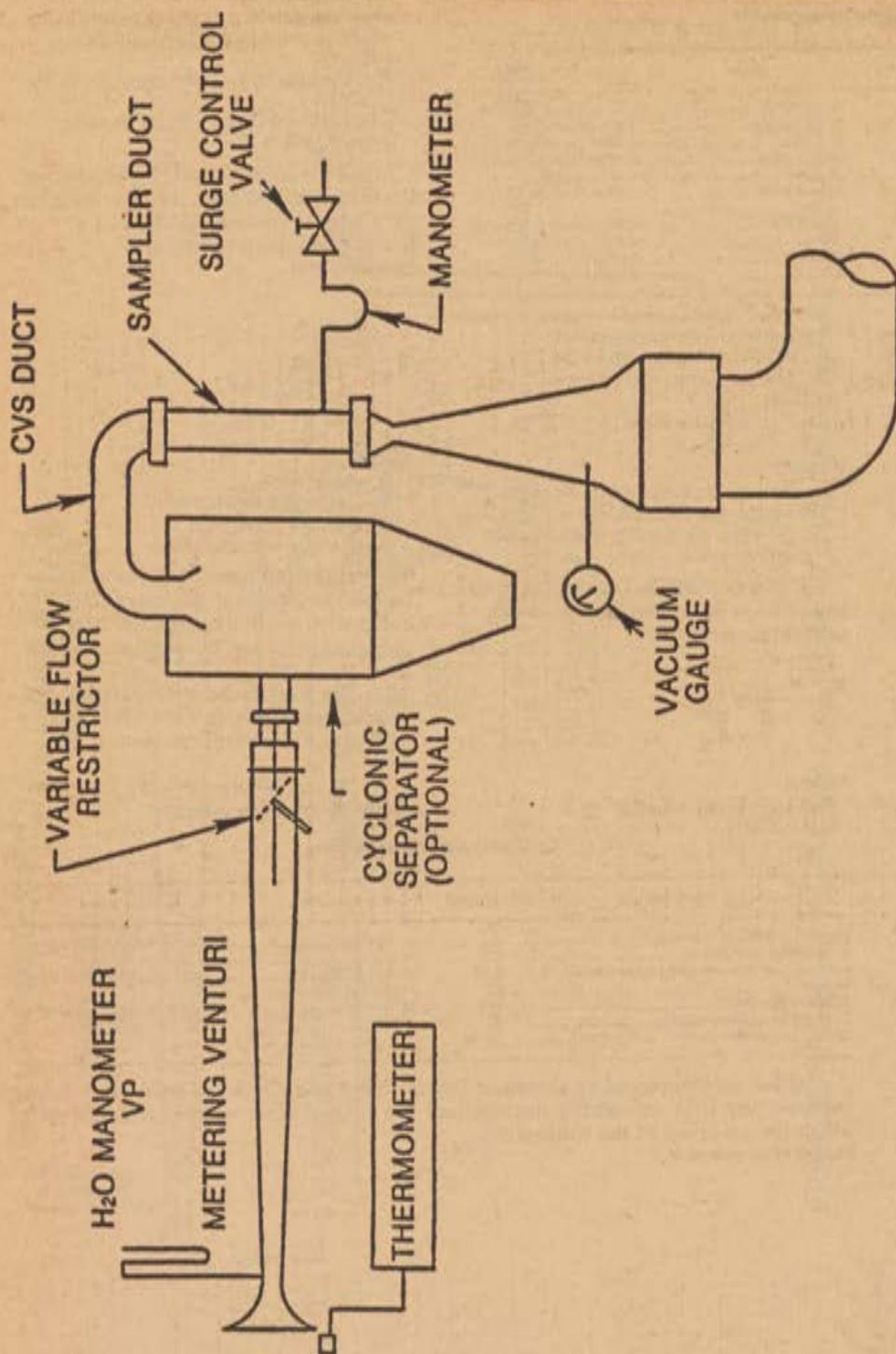


FIGURE N86-9 — CFV-CVS CALIBRATION CONFIGURATION

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(5) Set the variable flow restrictor to the open position, start the blower, and allow the system to stabilize. Record data from all instruments.

(6) Vary the flow restrictor and make at least 8 readings across the critical flow range of the venturi.

(7) *Data analysis.* The data recorded during the calibration are to be used in the following calculations:

(i) The air flow rate, Q_s , at each test point is calculated in standard cubic feet per minute from the flow meter data using the manufacturer's prescribed method.

(ii) Calculate values of the calibration coefficient for each test point:

$$K_v = \frac{Q_s \sqrt{T_v}}{P_v}$$

Where:

Q_s = Flow rate in standard cubic feet per minute, standard conditions are 68°F, 29.92 in. Hg (20°C, 101.3 kPa).

T_v = Temperature at venturi inlet, R(K).

P_v = Pressure at venturi inlet, mm Hg (kPa).

= $P_n - PPI$ (Sp. Gr./13.57).

for SI units: $P_v = P_n - PPI$

Where:

PPI = Venturi inlet pressure depression, in. Fluid (kPa).

Sp. Gr. = Specific gravity of manometer fluid, relative to water.

(iii) Plot K_v as a function of venturi inlet pressure. For sonic flow, K_v will have a relatively constant value. As pressure decreases (vacuum increases), the venturi becomes unchoked and K_v decreases. See Figure N86-10

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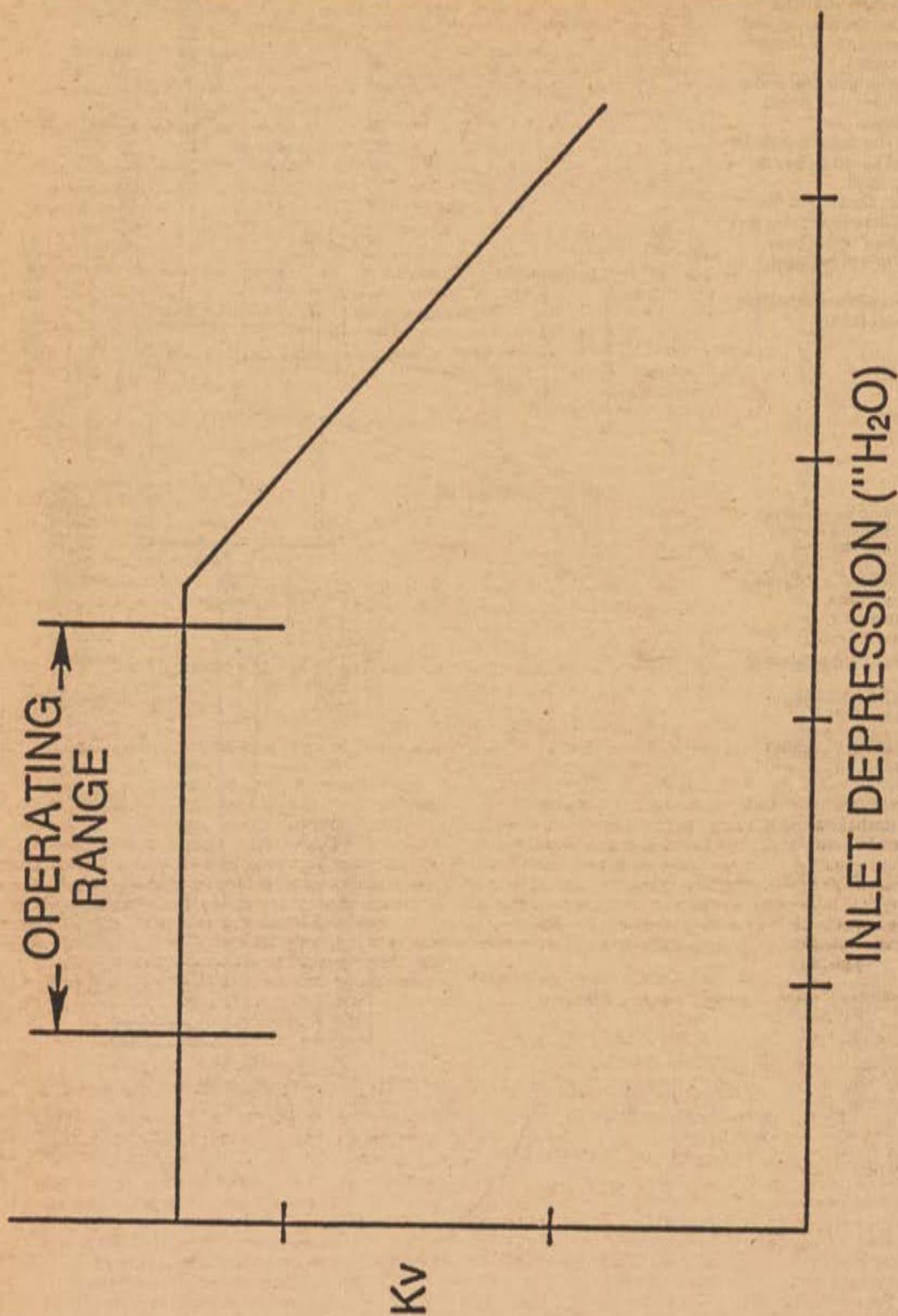


FIGURE N86-10 — SONIC FLOW CHOKING

(iv) for a minimum of 8 points in the critical region calculate an average K_v and the standard deviation.

(v) If the standard deviation exceeds 0.3 percent of the average K_v , take corrective action.

(e) *CVS system verification.* The following "gravimetric" technique can be used to verify that the CVS and analytical instruments can accurately measure a mass of gas that has been injected into the system. (Verification can also be accomplished by constant flow metering using critical flow orifice devices.)

(1) Obtain a small cylinder that has been charged with pure propane or carbon monoxide gas (caution—carbon monoxide is poisonous).

(2) Determine a reference cylinder weight to the nearest 0.01 grams.

(3) Operate the CVS in the normal manner and release a quantity of pure propane or carbon monoxide into the system during the sampling period (approximately 5 minutes).

(4) The calculations of § 86.1342-86 are performed in the normal way except in the case of propane. The density of propane (17.56 g/ft³/carbon atom (0.6201 kg/m³/carbon atom)) is used in place of the density of exhaust hydrocarbons. In the case of carbon monoxide, the density of 32.97 g/ft³ (1.164 kg/m³) is used.

(5) The gravimetric mass is subtracted from the CVS measured mass and then divided by the gravimetric mass to determine the percent accuracy of the system.

(6) Good engineering practice requires that the cause for any discrepancy greater than ±2 percent must be found and corrected.

23. A new § 86.1320-86 is added and reads as follows:

§ 86.1320-86 Gas meter or flow instrumentation calibration, particulate measurement.

Sampling for particulate emissions requires the use of gas meters or flow instrumentation to determine flow through the particulate filters. This instrument shall receive initial and periodic calibrations as follows:

(a)(1) Install a standard air flow measurement device (such as laminar flow element) upstream of the instrument. This standard device shall measure air flow at standard conditions. Standard conditions are defined as 68°F (20°C) and 29.92 inches of mercury (101.3 kPa). A critical flow orifice, a bellmouth nozzle, or a laminar flow element is recommended as the standard device.

(2) Flow air through the calibration system at the sample flow rate used for particulate testing and at the

backpressure which occurs during the sample test.

(3) When the temperature and pressure in the system have stabilized, measure the gas meter indicated volume of the instrument over a time period of at least 5 minutes and until a flow volume of at least ±1 percent accuracy can be determined by the standard device. Record the stabilized air temperature and pressure upstream of the instrument and as required for the standard device.

(4) Calculate air flow at standard conditions as measured by both the standard device and the instrument.

(5) Repeat the procedures of paragraphs (b) through (d) above using flow rates which are 10 percent above the nominal sampling flow rate and 10 percent below the nominal sampling flow rate.

(6) If the air flow at standard conditions measured by the instrument differs by more than ±1 percent from the standard measurement at any of the three measured flow rates, then a correction shall be made by either of the following two methods:

(i) Mechanically adjust the instrument so that it agrees within 1 percent of the standard measurement at the three specified flow rates, or

(ii) Develop a continuous best fit calibration curve for the instrument (as a function of the standard device flow measurement) from the three calibration points that represents the data to within 1 percent at all points to determine corrected flow.

(b) *Other systems.* A bell prover may be used to calibrate the instrument if the procedure outlined in ANSI B109.1-1973 is used. Prior approval by the Administrator is not required to use the bell prover.

24. A new § 86.1321-86 is added and reads as follows:

§ 86.1321-86 Hydrocarbon analyzer calibration.

The FID hydrocarbon analyzer shall receive the following initial and periodic calibration. The HFID shall be operated to a set point ±10°F (±5.5°C) between 365 and 385°F (185 and 197°C).

(a) Initial and periodic optimization of detector response. Prior to its introduction into service and at least annually thereafter the FID hydrocarbon analyzer shall be adjusted for optimum hydrocarbon response. Alternate methods yielding equivalent results may be used, if approved in advance by the Administrator.

(1) Follow the manufacturer's instructions for initial instrument start-up and basic operating adjustment using

the appropriate fuel (see § 86.1314-86) and zero-grade air.

(2) Optimize on the most common operating range. Introduce into the analyzer, a propane in air mixture with a propane concentration equal to approximately 90% of the most common operating range.

(3) One of the following procedures is required for FID or HFID optimization.

(i) The procedures outlined in Society of Automotive Engineers (SAE) paper No. 770141, "Optimization of Flame Ionization Detector for Determination of Hydrocarbons in Diluted Automobile Exhaust"; author, Glenn D. Reschke.

(ii) The HFID optimization procedures outlined in 40 CFR 86, Subpart D.

(iii) Alternate procedures are allowed, if approved in advance by the Administrator.

(4) After the optimum flow rates have been determined, they are recorded for future reference.

(b) *Initial and periodic calibration.* Prior to its introduction into service and monthly thereafter the FID or HFID hydrocarbon analyzer shall be calibrated on all normally used instrument ranges. Use the same flow rate as when analyzing samples.

(1) Adjust analyzer to optimize performance.

(2) Zero the hydrocarbon analyzer with zero-grade air.

25. A new § 86.1322-86 is added and reads as follows:

§ 86.1322-86 Carbon monoxide analyzer calibration.

The NDIR carbon monoxide analyzer shall receive the following initial and periodic calibrations:

(a) Initial and periodic interference check. Prior to its introduction into service and annually thereafter the NDIR carbon monoxide analyzer shall be checked for response to water vapor and CO₂:

(1) Follow the manufacturer's instructions for instrument start-up and operation. Adjust the analyzer to optimize performance on the most sensitive range to be used.

(2) Zero the carbon monoxide analyzer with either zero-grade air or zero-grade nitrogen.

(3) Bubble a mixture of 3 percent CO₂ in N₂ through water at room temperature and record analyzer response.

(4) An analyzer response of more than 1 percent of full scale for ranges above 300 ppm full scale or more than 3 ppm on ranges below 300 ppm full scale will require corrective action. (Use of conditioning columns is one form of corrective action which may be taken.)

(b) *Initial and periodic calibration.* Prior to its introduction into service and

smoothly thereafter the NDIR carbon monoxide analyzer shall be calibrated.

(1) Adjust the analyzer to optimize performance.

(2) Zero the carbon monoxide analyzer with either zero-grade air or zero-grade nitrogen.

(3) Calibrate on each used operating range with carbon monoxide in N₂ calibration gases having nominal concentrations of 15, 30, 45, 60, 75, and 90 percent of that range. Additional calibration points may be generated. For each range calibrated, if the deviation from a least-squares best-fit straight line is 2 percent or less of the value at each data point, concentration values may be calculated by use of a single calibration factor for that range. If the deviation exceeds 2 percent at any point, the best-fit non-linear equation which represents the data to within 2 percent of each test point shall be used to determine concentration.

(c) The initial and periodic interference, system check, and calibration test procedures specified in 40 CFR 86, Subpart D may be used in lieu of the procedures specified in this section.

26. A new § 86.1323-86 is added and reads as follows:

§ 86.1323-86 Oxides of nitrogen analyzer calibration.

The chemiluminescent oxides of nitrogen analyzer shall receive the following initial and periodic calibration.

(a) Prior to its introduction into service and weekly thereafter the chemiluminescent oxides of nitrogen analyzer shall be checked for NO_x to NO converter efficiency. Figure N86-11 is a reference for the following steps:

(1) Follow the manufacturer's instructions for instrument start-up and operation. Adjust the analyzer to optimize performance.

(2) Zero the oxides of nitrogen analyzer with zero-grade air or zero-grade nitrogen.

(3) Connect the outlet of the NO_x generator to the sample inlet of the oxides of nitrogen analyzer which has been set to the most common operating range.

(4) Introduce into the NO generator analyzer-system an NO in nitrogen (N₂) mixture with a NO concentration equal to approximately 80 percent of the most common operating range. The NO_x content of the gas mixture shall be less than 5 percent of the NO concentration.

(5) With the oxides of nitrogen analyzer in the NO mode, record the connection of NO indicated by the analyzer.

(6) Turn on the NO_x generator O₂ (or air) supply and adjust the O₂ (or air) flow rate so that the NO indicated by the analyzer is about 10 percent less than indicated in step (5). Record the concentration of NO in this NO+O₂ mixture.

(7) Switch the NO_x generator to the generation mode and adjust the generation rate so that the NO measured on the analyzer is 20 percent of that measured in step (5). There must be at least 10 percent unreacted NO at this point. Record the concentration of residual NO.

(8) Switch the oxides of nitrogen analyzer to the NO_x mode and measure total NO_x. Record this value.

(9) Switch off the NO_x generator but maintain gas flow through the system. The oxides of nitrogen analyzer will indicate the NO_x in the NO+O₂-mixture. Record this value.

(10) Turn off the NO_x generator O₂ (or air) supply. The analyzer will now indicate the NO_x in the original NO in N₂ mixture. This value should be no more than 5 percent above the value indicated in step (4).

(11) Calculate the efficiency of the NO_x converter by substituting the concentrations obtained into the following equation:

$$\text{Percent Efficiency} = [1 + a - b/c - d] \times 100$$

Where:

a = concentration obtained in step (8),

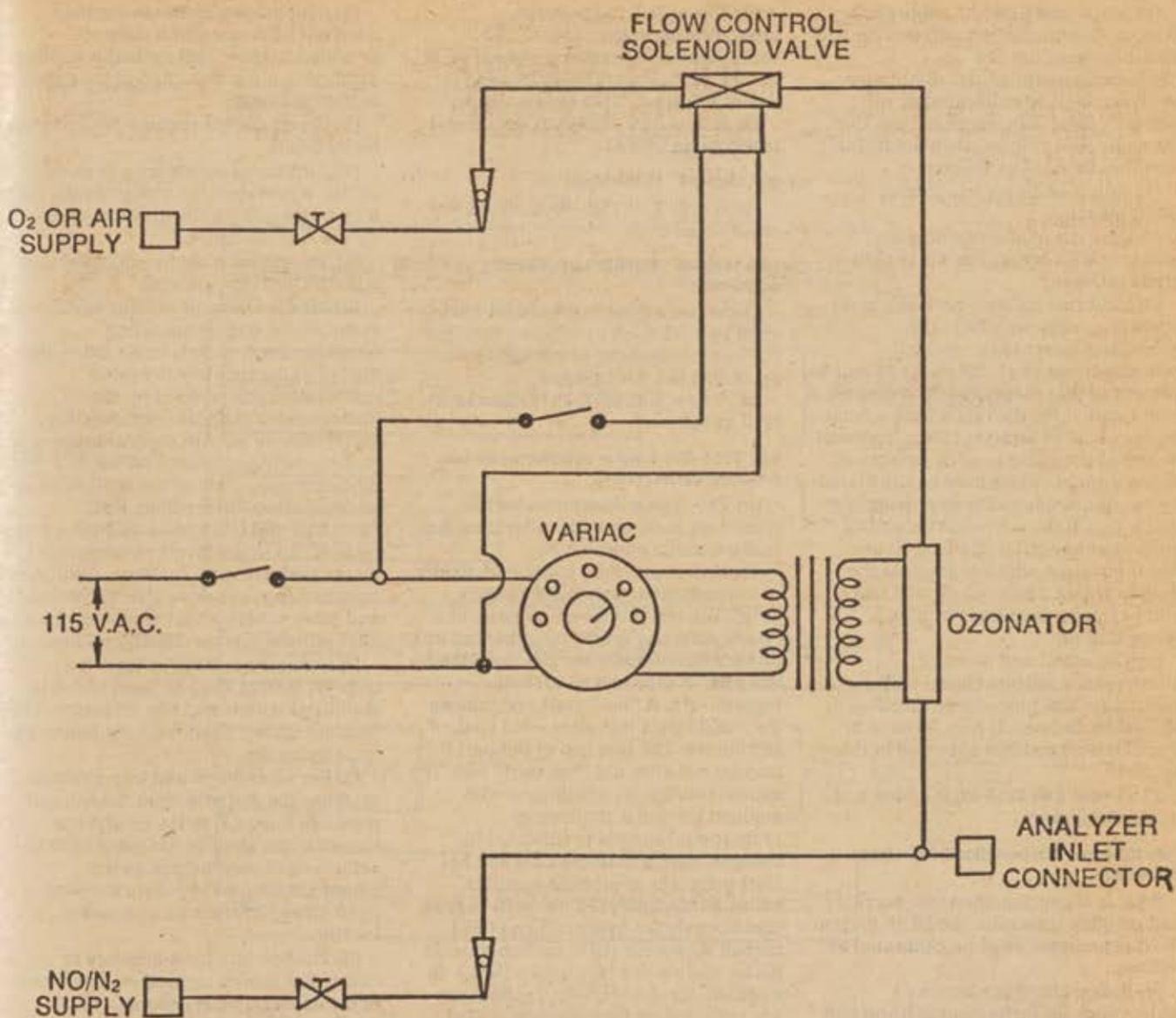
b = concentration obtained in step (9),

c = concentration obtained in step (6),

d = concentration obtained in step (7).

If converter efficiency is not greater than 90 percent corrective action will be required.

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(SEE FIG. N86-7 FOR SYMBOL LEGEND)

FIGURE N86-11 — NO_x CONVERTER EFFICIENCY DETECTOR

(b) Initial and periodic calibration. Prior to its introduction into service and monthly thereafter the chemiluminescent oxides of nitrogen analyzer shall be calibrated on all normally used instrument ranges. Use the same flow rate as when analyzing samples. Proceed as follows:

(1) Adjust analyzer to optimize performance.

(2) Zero the oxides of nitrogen analyzer with zero-grade air or zero-grade nitrogen.

(3) Calibrate on each normally used operating range with NO in N₂ calibration gases with nominal concentrations of 15, 30, 45, 60, 75 and 90 percent of that range. For each range calibrated, if the deviation from a least-squares best-fit straight line is 2 percent or less of the value at each data point, concentration values may be calculated by use of a single calibration factor for that range. If the deviation exceeds 2 percent at any point, the best-fit non-linear equation which represents the data to within 2 percent of each test point shall be used to determine concentration.

(c) The initial and periodic interferences, system check, and calibration test procedures specified in 40 CFR 86, Subpart D may be used in lieu of the procedures specified in this section.

27. A new § 86.1324-86 is added and reads as follows:

§ 86.1324-86 Carbon dioxide analyzer calibration.

Prior to its introduction into service and monthly thereafter the NDIR carbon dioxide analyzer shall be calibrated as follows:

(a) Follow the manufacturer's instructions for instrument start-up and operation. Adjust the analyzer to optimize performance.

(b) Zero the carbon dioxide analyzer with either zero-grade air or zero-grade nitrogen.

(c) Calibrate on each normally used operating range with carbon dioxide in N₂ calibration gases having nominal concentrations of 15, 30, 45, 60, 75, and 90 percent of that range. Additional calibration points may be generated. For each range calibrated, if the deviation from a least-squares best-fit straight line is 2 percent or less of the value at each data point, concentration values may be calculated by use of a single calibration factor for that range. If the deviation exceeds 2 percent at any point, the best-fit non-linear equation which represents the data to within 2 percent of each test point shall be used to determine concentration.

(d) The initial and periodic interferences, system check, and calibration test procedures specified in 40 CFR 86, Subpart D may be used in lieu of the procedures in this section.

28. A new § 86.1325-86 is added and reserved as follows:

§ 86.1325-86 [Reserved]

29. A new § 86.1326-86 is added and reads as follows:

§ 86.1326-86 Calibration of other equipment.

Other test equipment used for testing shall be calibrated as often as required by the manufacturer or necessary according to good practice.

30. A new § 86.1327-86 is added and read as follows:

§ 86.1327-86 Engine dynamometer test procedures; overview.

(a) The engine dynamometer test procedure is designed to determine the brake-specific emission of hydrocarbons, carbon monoxide, oxides of nitrogen, and particulate (diesels only). The test procedure consists of a "cold" start test following either natural or forced cool-down periods described in §§ 86.1334-86 and 86.1335-86, respectively. A "hot" start test follows the "cold" start test after a hot soak of 20 minutes. The idle test of Subpart P may be run after the "hot start" test. The exhaust emissions are diluted with ambient air and a continuous proportional sample is collected for analysis during both the cold and hot start tests. The composite samples collected are analyzed either in bags or continuously for hydrocarbons (HC), carbon monoxide (CO), carbon dioxide (CO₂), and oxides of nitrogen (NO_x). In addition, for diesels only, particulates are collected on fluorocarbon coated glass fiber filters or fluorocarbon based (membrane) filters and the dilution air is filtered.

(b) Engine torque and rpm shall be recorded continuously during both the cold and hot start tests. Data points shall be recorded at least once every second.

(c) Using the torque and rpm feedback signals the brake horsepower is integrated with respect to time for the cold and hot cycles. This produces a brake horsepower-hour value that enables the brake-specific emissions to be determined (see § 86.1344-86, Calculations; exhaust emissions).

(d)(1) When an engine is tested for exhaust emissions or is operated for service accumulation on an engine dynamometer, the complete engine shall be tested, with all emission control devices installed and functioning.

(2) Evaporative emission controls need not be connected if data are provided to show that normal operating conditions are maintained in the engine induction system.

(3) On air cooled engines, the fan shall be installed.

(4) Additional accessories (e.g., oil cooler, alternators, air compressors, etc.) may be installed with advance approval by the Administrator.

(5) The engine must be equipped with a production type starter.

(e) Means of engine cooling which will maintain the engine operating temperatures (e.g., intake air, oil, water, etc.) at approximately the same temperature as specified by the manufacturer shall be used. Auxiliary fan(s) may be used to maintain engine cooling during operation on the dynamometer. Only water is allowed as an engine-coolant medium. Rust inhibitors and lubrication additives may be used, up to the levels recommended by the additive manufacturer. Antifreeze mixtures (e.g., ethylene glycol, alcohols) and other coolants that would enhance heat transfer are specifically prohibited.

(f) *Exhaust system.* A chasis-type exhaust system shall be used which is stabilized with respect to emissions. The exhaust system shall meet the following requirements:

(1) For all catalyst and trap-oxidizer systems, the distance from the exhaust manifold flange(s) to the catalyst or trap-oxidizer shall be the same as in the vehicle configuration unless the manufacturer provides data showing equivalent performance at another location.

(2) The exhaust back pressure or restriction shall be typical of those seen in the actual vehicle exhaust system configuration or the back pressure shall be the manufacturer's recommended maximum exhaust back pressure limit.

(3) For all diesel engines, the distance from the exhaust manifold flange to the exit of the chasis-type exhaust system shall be a maximum of 12 feet.

31. A new § 86.1328-86 is added and reserved as follows:

§ 86.1328-86 [Reserved]

32. A new § 86.1329-86 is added and reserved as follows:

§ 86.1329-86 [Reserved]

33. A new § 86.1330-86 is added as reads as follows:

§ 86.1330-86 Test sequence, general requirements.

(a) The test sequence shown in Figure N86-12 shows the major steps encountered as the test engine undergoes the procedures subsequently described.

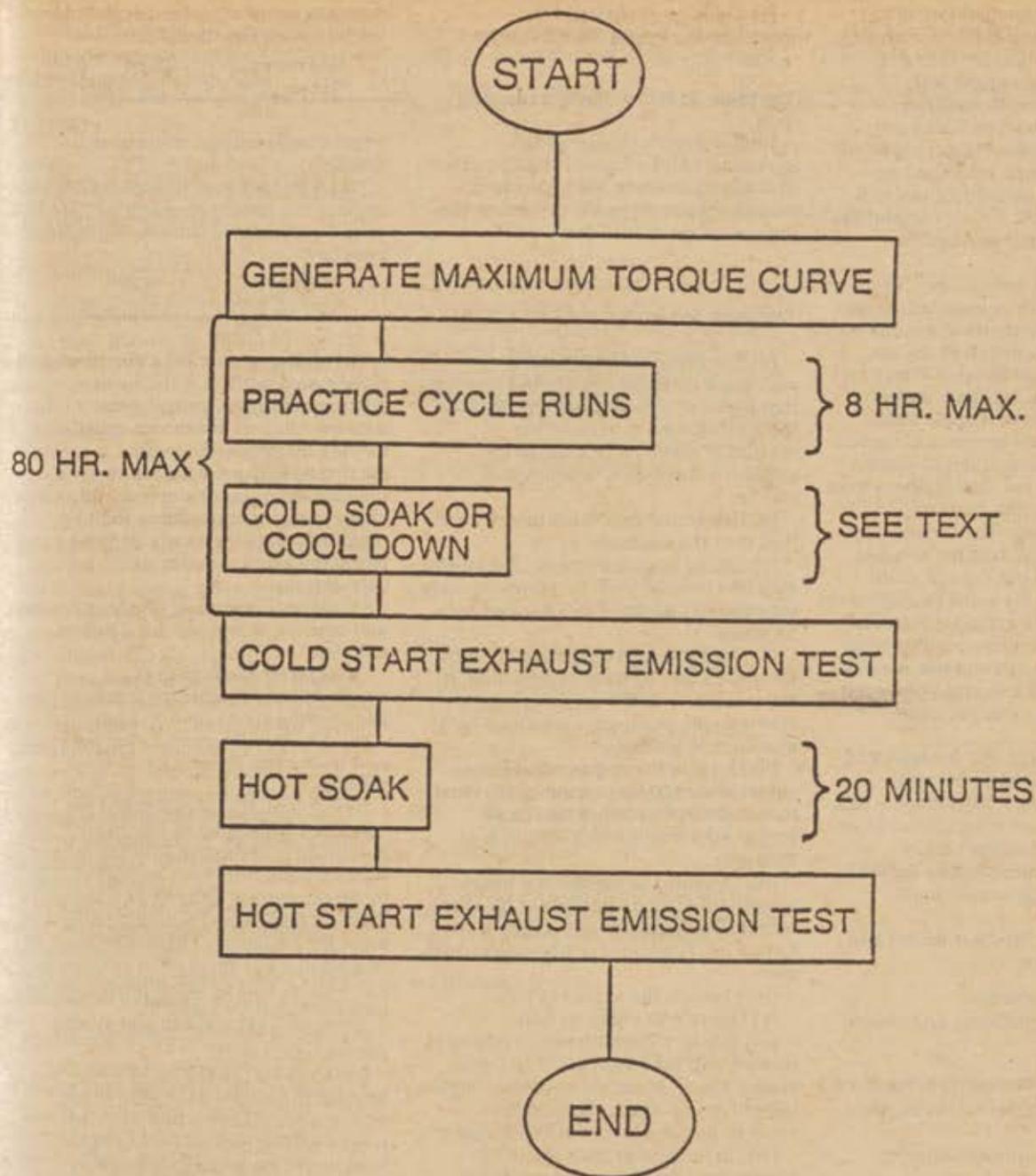


FIGURE N86-12 — TEST SEQUENCE

(b) The average temperature of the engine intake air and CVS dilution air shall be maintained at 25° C ± 5° C (77° F ± 9° F) throughout the test sequence. Engines with auxiliary emission control devices which are temperature dependent (e.g., chokes, air cleaner, hot air doors, etc.) shall be tested at an average ambient test cell temperature 25° C ± 5° C throughout the test sequence, except as noted in § 86.1335-86.

(c) No control of ambient or CVS dilution air humidity is required. Engine intake air humidity shall not exceed 90 grains of water per pound of dry air.

(d) The idle test of Subpart P may be run after completion of the hot start exhaust emission test, if applicable.

(e) The barometric pressure observed during the generation of the maximum torque curve shall not deviate more than 1 in. Hg from the value measured at the beginning of the map. The barometric pressure observed during the exhaust emission test shall not deviate more than 1 in. Hg from the value measured at the beginning of the emission test. The average barometric pressure observed during the exhaust emission test must be within 1 in. Hg of the average observed during the maximum torque curve generation.

(f) *Diesel Engines only.* Air inlet and exhaust restrictions shall be set to represent the average restrictions which would be seen in use in a representative application. Inlet depression and exhaust backpressure shall be set with the engine operating at maximum horsepower.

34. A new § 86.1331-86 is added and reserved as follows:

§ 86.1331-86 [Reserved]

35. A new § 86.1332-86 is added and reads as follows:

§ 86.1332-86 Engine mapping procedures.

(a) Mount test engine on the engine dynamometer.

(b) Determine minimum mapping speed.

(1) *Gasoline-fueled engines.* The minimum mapping speed shall be calculated from the following equations:

(i) Minimum Speed = Curb Idle RPM—200 RPM; or

(ii) Minimum Speed = 400 RPM, whichever is greater.

(2) *Diesel-engines.* The minimum mapping speed shall be calculated from the following equations:

(i) Minimum Speed = Low Idle RPM—200 RPM; or

(ii) Minimum Speed = 400 RPM, whichever is greater.

(c) Determine maximum mapping speed.

(1) *Gasoline-fueled.* (i) For ungoverned engines the maximum

$$\text{Maximum Speed} = \text{Curb Idle RPM} +$$

(ii) For governed engines the maximum mapped speed shall be either that speed at which the wide open throttle torque drops off to zero, or the maximum speed as calculated for

$$\text{Maximum Speed} = \text{Curb Idle RPM} +$$

(ii) For governed engines the maximum mapping speed shall be either that speed at which wide open throttle torque drops off to zero, or the maximum speed as calculated for ungoverned engines, whichever is smaller.

(d) Determine maximum torque curve (i.e., map the engine).

(1) During engine warm-up, the engine may be operated such that a preliminary estimate of measured rated speed can be made.

(2) *Gasoline-fueled engines.* (i) Start the engine and operate at zero load in accordance with the manufacturer's start-up and warm-up procedures for 1 minute ± 30 seconds.

(ii) Operate the engine at a torque equivalent to 10 ± 3 percent of the most recent determination of maximum torque for 4 minutes ± 30 seconds at 2000 rpm.

(iii) Operate the engine at a torque equivalent to 55 ± 5 percent of the most recent determination of maximum torque for 35 minutes ± 1 minute at 2000 rpm.

(iv) Operate the engine at idle.

(v) Operate the throttle fully.

(vi) While still maintaining wide-open throttle and full-load obtain minimum engine speed. Maintain minimum engine speed for 15 seconds. Record the average torque during the last 5 seconds.

(vii) In no greater than 100 RPM increments, determine the maximum torque curve from minimum speed to maximum speed. Hold each test point for 15 seconds and record the average torque over the last 5 seconds.

(viii) *Alternate mapping technique.* In place of (d)(2)(vi) and (vii) above, a continual sweep of RPM is allowed. While operating at wide open throttle, the engine speed is increased at a constant 8 RPM/second (± 1 RPM/second) from minimum speed to maximum speed. Speed and torque points shall be recorded at a sample rate of at least one point per second.

(ix) Recalculate minimum and maximum speeds per (b)(1) and (c)(1)(i)

mapping speed shall be calculated from the following equations:

$$115 \left(\frac{\text{Measured Rated RPM} - \text{Curb Idle RPM}}{100} \right)$$

ungoverned engines, whichever is smaller.

(2) *Diesel-engines.* (i) For ungoverned engines the maximum mapping speed shall be calculated from the following equation:

$$113 \left(\frac{\text{Measured Rated RPM} - \text{Curb Idle RPM}}{100} \right)$$

or (ii) of this section using the measured rated speed derived from the new maximum torque curve. If either of the new minimum or maximum speeds lay outside the range of speeds encompassed by the actual map, then the map shall be considered void. The entire mapping procedures shall be repeated, using the newly derived measured rated speed in all calculations.

(3) *Diesel engines.* (i) Start the engine and operate at free idle for 2 to 3 minutes.

(ii) Operate the engine at approximately 50 percent power at the peak torque speed for 5 to 7 minutes.

(iii) Operate the engine at rated speed and wide open throttle for 25 to 30 minutes.

(iv) *Option.* It is permitted to precondition the engine at rated speed and maximum horsepower until the oil and water temperatures are stabilized. The temperatures are defined as stabilized if they are maintained within 2 percent of point for 2 minutes. The engine must be operated a minimum of 10 minutes for this option. This optional procedure may be substituted for step (iii).

(v) Unload the engine and operate at the low idle speed.

(vi) Operate the engine at wide open throttle and minimum engine speed. Increase the engine speed at a constant rate of 8 RPM/second (± 1 RPM/second) from minimum to maximum speed. Engine speed and torque points shall be recorded at a sample rate of at least one point per second.

(vii) Recalculate minimum and maximum speeds per (b)(2) and (c)(2)(i) or (ii) of this section using the measured rated speed derived from the new maximum torque curve. If either of the new minimum or maximum speeds lay outside the range of speeds encompassed by the actual map, then the map shall be considered void. The entire mapping procedure shall be repeated, using the newly derived measured rated speed in all calculations.

(e) Mapping curve generation.

(1) *Gasoline-fueled engines.* (i) Fit all data points recorded under (d)(2)(vi) and (vii) of this section (100 RPM increments) with a cubic spline technique.

(ii) All points generated under the continuous RPM sweep by step (d)(2)(vi) and (viii) shall be connected by linear interpolation between points.

(iii) For governed engines, all points above the maximum speed (see (c)(1)(ii) of this section) shall be assigned maximum torque values of zero for purposes of cycle generation.

(iv) For all engines, all speed points below 400 RPM shall be assigned a maximum torque value equal to that observed at 400 RPM for purposes of cycle generation.

(v) The torque curve resulting from step (i) through (iv) is the mapping curve and will be used to convert the normalized torque values in the engine cycle (see Appendix I, f) to actual torque values for the test cycle.

(2) *Diesel-engines.* (i) Connect all data points recorded under (d)(3) (vi) and (vii) of this section using linear interpolation between points.

(ii) For governed engines, all points above the maximum speed (see (c)(2)(ii) of this section) shall be assigned maximum torque values of zero for purposes of cycle generation.

(iii) For all engines, all speed points below 400 RPM shall be assigned a maximum torque value equal to that observed at 400 RPM for purposes of cycle generation.

(iv) The torque curve resulting from steps (i) through (iii) is the mapping curve and will be used to convert the normalized torque values in the engine cycle (see Appendix I, g) into actual torque values for the test cycle.

(f) *Alternate mapping and mapping curve generation techniques.* If a manufacturer believes that the above mapping techniques are unsafe or unrepresentative for any given engine or engine family, alternate mapping techniques may be used. Alternate techniques may be used only if approved in advance by the Administrator, and only if the Administrator judges that change to be justified, and the alternate procedure to be technically correct.

36. A new § 86.1333-86 is added and reads as follows:

§ 86.1333-86 Transient test cycle generation.

(a) The heavy-duty transient engine cycles for gasoline- and diesel-fueled engines are listed in Appendix I (f and g). These second-by-second listings are designed to represent transient torque and RPM maneuvers characteristic of

heavy-duty vehicles. Both RPM and torque are normalized in these listings.

(1) To unnormalize RPM use the following equation:

$$\text{Actual RPM} = \frac{\% \text{RPM} (\text{Measured Rated RPM} - \text{Curb Idle RPM})}{100} + \text{Curb Idle RPM}$$

(Curb idle for diesel engines is defined as the low idle RPM.)

(2) Torque is normalized to the maximum torque at the RPM listed with it. Therefore, to unnormalize the torque values in the cycle, the maximum torque curve for the engine in question must be used. The generation of the maximum torque curve is described in § 86.1332.86.

(b) *Example of the unnormalization procedure.* The following test point shall be unnormalized:

Percent RPM	Percent torque
43	82

The test engines have these values:
Measured Rated RPM = 3800 (Does not appear on given torque curve.)
Curb Idle RPM = 600.
Maximum torque curve as illustrated in Figure N86-13.

Calculate actual RPM:
Actual RPM = percent RPM (Measured Rated RPM - Idle RPM) / 100 + Idle RPM
Actual RPM = 43(3800 - 600) / 100 + 600
Actual RPM = 1976

Determine actual torque:
Determine the maximum torque at 1976 RPM from Figure N86-13. Then multiply this value (358 ft-lb) by 0.82. This results in an actual torque of 294 ft-lbs.

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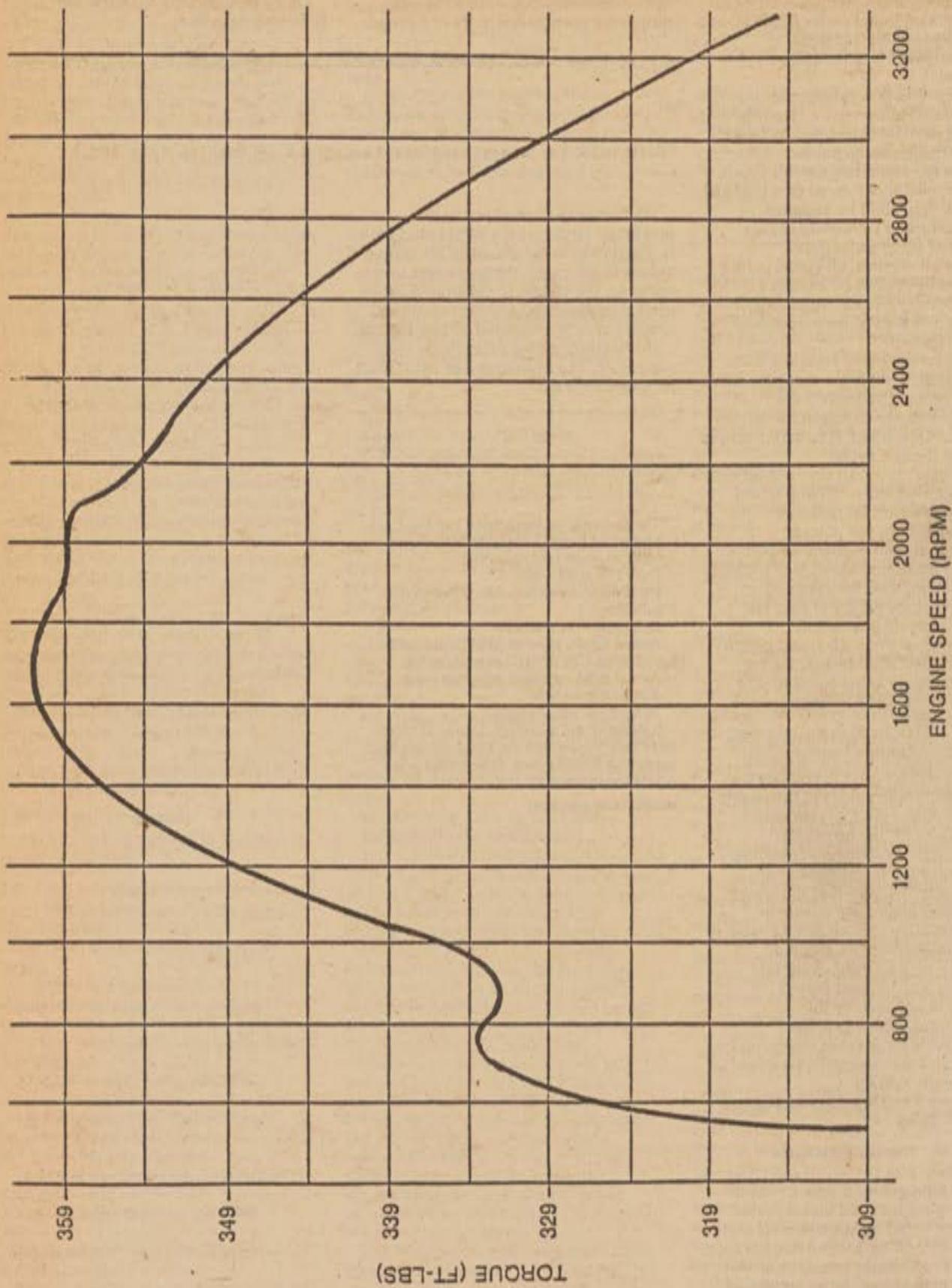


FIGURE N86-13 — SAMPLE MAXIMUM TORQUE CURVE FOR A GASOLINE-FUELED ENGINE.

(c) Engine speed and torque shall be recorded at least once every second during the cold start test and hot start test. The torque and RPM feedback signals may be electrically filtered.

(d) *Gasoline-fueled engines.* The zero percent speed specified in the gasoline-fueled engine cycle (Appendix I (f)) shall be superceded by proper operation of the engines automatic choke.

(1) During automatic choke operation a manual transmission engine shall be allowed to idle at whatever speed is required to produce a feedback torque of 0 ft-lbs \pm 10 ft-lbs (using for example clutch disengagement, speed to torque control switching, software overrides, etc.) at those points in Appendix I where both reference speed and reference torque are zero percent values.

(2) During automatic choke operation an automatic transmission engine shall be allowed to idle at whatever speed is required to produce a feedback torque of CITT ft-lbs \pm 10 ft-lbs (see (e)(2) of this section for definition of CITT) at those points in Appendix I where both reference speed and reference torque are zero percent values.

(3) This automatic choke high idle allowance is permitted only for the first 150 seconds of the cold cycle and the first 30 seconds of the hot cycle, after which the cycles shall be run as specified in Appendix I (f). (See 86.1341-86 for allowances in the cycle validation criteria.)

(e) *Automatic Transmissions.* The reference cycles Appendix I (f and g) shall be altered for engines intended for use with automatic transmissions.

(1) Zero percent speed for automatic transmission engines is defined as curb idle RPM, i.e., in-vehicle, coupled with automatic transmission in gear.

(2) All zero-percent speed, zero-percent torque points (idle points) shall be modified to zero percent speed, x percent torque. Using the manufacturers' specified curb idle transmission torque (CITT), the maximum torque available at the curb idle (i.e., with transmission) RPM as determined from the maximum torque curve generated in § 86.1332-86, x percent torque is defined per the following equation:

$$x\% = \frac{\text{CITT} \times 100}{\text{Maximum Torque at Curb Idle RPM}}$$

37. A new § 86.1334-86 is added and reads as follows:

§ 86.1334-86 Pre-test engine and dynamometer preparation.

Control system calibration. (a) Before the cold soak or cool down, final

calibration of the dynamometer and throttle control systems may be performed. These calibrations may consist of steady-state operation and/or actual practice cycle runs, but emissions may not be measured.

(b) Following any practice runs or calibration procedures, the engine shall be turned off and allowed to either cold soak at 60° to 86°F for a minimum of 12 hours, or be cooled per § 86.1335-86.

38. A new § 86.1335-86 is added and reads as follows:

§ 86.1335-86 Optional forced cool-down procedure.

(a) This forced cool-down procedure applies to both gasoline and diesel-fueled engines.

(b) No substances or fluids may be applied to the engines internal or external surfaces except for water and air, and only as prescribed in (c) and (d) of this section.

(c) For water-cooled engines two types of cooling are permitted.

(1) Water may be circulated through the engine's water coolant system.

(i) The cooling water may be flowed in either direction and at any desired flow rate. The thermostat may be removed or blocked open during the cool down but must be restored before the exhaust emissions test begins.

(ii) The temperature of the circulated or injected water shall be between 10° C (50° F) and 30° C (86° F).

(iii) No fluid except water and no fluid or substance in solution with water is permitted. This does not preclude the use of a building's standard water supply for forced cool-down purposes.

(2) Flows of air may be directed at the exterior of the engine.

(i) Air shall be directed uniformly over the entire exterior surface of the engine at any desired flow rate.

(ii) The temperature of the cooling air shall not exceed 30° C (86° F). This is the only occasion when test cell ambient air temperature may deviate from the general specifications set forth in § 86.1330-86(b), i.e., may be less than 20° C (68° F).

(d) For air-cooled engines only cooling as prescribed in (c)(2) of this section is permitted.

(e) The cold cycle exhaust emission test may begin after a forced cool down only when the engine oil temperature as measured at the dipstick is between 20° C and 24° C (68° F and 75° F). No engine oil change is permitted during the test sequence, nor is any direct or indirect cooling of engine oil permitted except by natural conduction and convection associated with the procedures in (c) and (d) of this section.

(f)(1) The cold cycle exhaust emission test for gasoline engines equipped with catalytic converters may begin after a forced cool down only when the catalyst bed temperature at the catalyst outlet is 25° C \pm 5° C (77° F \pm 9° F), in addition to the temperature restriction in (e) of this section.

(2) Catalyst cool down may be accomplished in whatever manner and using whatever coolant deemed appropriate by proper engineering judgment. The catalyst, engine, and exhaust piping configurations shall not be separated, altered, or moved in any way during the cool down.

(g) At the completion of the forced cool down, all general requirements specified in § 86.1330-86 and the oil temperature specification set forth in (e) of this section must be met before the cold cycle exhaust emission test may begin.

39. A new § 86.1336-86 is added and reads as follows:

§ 86.1336-86 Engine starting and restarting.

(a) *Gasoline-fueled engines.* This paragraph applies to gasoline-fueled engines only.

(1) The engine shall be started with a production engine starter motor according to the manufacturer's recommended starting procedures in the owner's manual. The 24 \pm 1 second free idle period shall begin when the engine starts.

(2) *Choke operation:* (i) Engines equipped with automatic chokes shall be operated according to the manufacturer's operating instructions in the owner's manual, including choke setting and "kick-down" from cold fast idle.

(ii) Engines equipped with manual chokes shall be operated according to the manufacturer's operating instructions in the owner's manual.

(3) The operator may use the choke, throttle, etc. where necessary to keep the engine running.

(4) If the manufacturer's operating instructions in the owner's manual do not specify a warm engine starting procedure, the engine (automatic- and manual-choke engines) shall be started by depressing the throttle half way and cranking the engine until it starts.

(b) *Diesel engines.* The engine shall be started with a production engine starting-motor according to the manufacturer's recommended starting procedures in the owner's manual. The 24 \pm 1 second free idle period shall begin when the engine starts.

(c)(1) If the engine does not start after 15 seconds of cranking, cranking shall cease and the reason for failure to start

shall be determined. The gas flow measuring device (or revolution counter) on the constant volume sampler (and the hydrocarbon integrator and particulate sample pump(s) when testing diesel vehicles, see § 86.1337, Engine dynamometer test run) shall be turned off during this diagnostic period. In addition, either the CVS should be turned off or the exhaust tube disconnected from the tailpipe during the diagnostic period. If failure to start is an operational error, the engine shall be rescheduled for testing from a cold start.

(2) If longer cranking times are recommended to the ultimate purchaser, such cranking times may be used provided the owner's manual and the service repair manual indicate the longer cranking times are normal, and if the use of the longer cranking times is approved in advance by the Administrator.

(3) If a failure to start occurs during the cold portion of the test and is caused by an engine malfunction, corrective action of less than 30 minutes duration may be taken (according to § 86.084-25), and the test continued. The sampling system shall be reactivated at the same time cranking begins. When the engine starts, the timing sequence shall begin. If failure to start is caused by engine malfunction and the engine cannot be started, the test shall be voided and corrective action may be taken according to § 86.084-25. The reasons for the malfunction (if determined) and the corrective action taken shall be reported to the Administrator.

(4) If a failure to start occurs during the hot start portion of the test and is caused by engine malfunction, the engine must be started within one minute of key on. The sampling system shall be reactivated at the same time cranking begins. When the engine starts, the transient engine cycle timing sequence shall begin. If the engine cannot be started within one minute of key on, the test shall be voided, corrective action taken, (according to § 86.084-25), and the engine rescheduled for testing. The reason for the malfunction (if determined) and the corrective action taken shall be reported to the Administrator.

(d) If the engine "false starts," the operator shall repeat the recommended starting procedure (such as resetting the choke, etc.).

(e) *Engine stalling.* (1) If the engine stalls during the initial idle period of either the cold or hot start test, the engine shall be restarted immediately using the appropriate cold or hot starting procedure and the test continued. If the engine cannot be started before the first

non-idle record of the cycle, the test shall be voided.

(2) If the engine stalls anywhere in the cold cycle, except in the initial idle period, the test shall be voided.

(3) If the engine stalls on the hot cycle portion of the test at any time up to and including 580 seconds into the hot cycle, the engine may be shut off and re-soaked for 20 minutes. The hot cycle may then be rerun. Any stalling of the engine or voiding of the hot cycle more than 580 seconds into the hot cycle shall result in a void test. Only one hot start re-soak and restart is permitted.

40. A new § 86.1337-86 is added and reads as follows:

§ 86.1337-86 Engine dynamometer test run.

(a) The following steps shall be taken for each test:

(1) Prepare the engine, dynamometer, and sampling system for the cold start tests. Change filters, etc. and leak check as necessary.

(2) Connect evacuated sample collection bags to the dilute exhaust and dilution air sample collection systems.

(3) Start the CVS (if not already on), the sample pumps, except the diesel particulate sample pump(s), if applicable, the temperature recorder, the engine cooling fan(s) and any data collection system (i.e., chart recorders, computers, data loggers, etc.). The heat exchanger of the constant volume sampler (if used), and the heated components of any continuous sampling system(s) (if applicable) shall be preheated to their respective operating temperatures before the test begins. See § 86.1304-86(e) for continuous sampling procedures.

(4) Adjust the sample flow rates to the desired flow rate and set the CVS gas flow measuring devices to zero.

Note.—CFV—CVS sample flow rate is fixed by the venturi design.

(5) Attach the CVS flexible exhaust tube to engine tailpipe(s).

(6) Carefully install a clean particulate sample filter into each of the filter holders for diesel tests. The filters must be handled with forceps or tongs. Rough or abrasive filter handling will result in erroneous weight determination.

(7) Follow the manufacturer's choke and throttle instructions for cold starting. Simultaneously start the engine and begin exhaust and dilution air sampling. For diesel engines, turn on the hydrocarbon, continuous NO_x, CO, or CO₂ (if used) analyzer(s) system integrator(s) and turn on the particulate sample pumps and indicate the start of the test on the data collection medium (i.e., mark the chart on a chart recorder,

set a byte on a computer or data logger, etc.).

(8) As soon as it is determined that the engine is started, start a "free idle" timer.

(9) Allow the engine to idle freely with no-load for 24±1 seconds. This idle period for automatic transmission engines may be interpreted as an idle speed in neutral or park. All other idle conditions shall be interpreted as an idle speed in gear. It is permissible to lug the engine down to curb idle speed during the last 8 seconds of the free idle period for the purpose of engaging dynamometer control loops.

(10) Begin the transient engine cycles such that the first non-idle record of the cycle occurs at 25±1 seconds. The free idle time is included in the 25±1 seconds.

Note.—During diesel testing, adjust the sample pump(s) so that the flow rate through the particulate sample probe or transfer tube is maintained at a constant value within ±5 percent of the set flow rate. Record the average temperature and pressure at the gas meter(s) or flow instrumentation inlet. If the set flow rate cannot be maintained because of high particulate loading on the filter, the test shall be terminated. The test shall be rerun using lower flow rate and/or a larger diameter filter.

(11) On the last record of the cycle cease sampling, immediately turn the engine off, and start a hot soak timer. For diesel engines immediately after the engine stops running, simultaneously turn off the gas flow measuring device(s) and the diesel hydrocarbon integrator, mark the hydrocarbon recorder chart, and turn off the particulate sample pump(s).

(12) Immediately after the engine is turned off, turn off the engine cooling fan(s) if used, and the CVS blower. As soon as possible transfer the "cold start cycle" exhaust and dilution air bag samples to the analytical system and process the samples according to § 83.1340-86 obtaining a stabilized reading of the exhaust sample on all analyzers within 20 minutes of the end of the sample collection phase of the test. For diesel engines carefully remove each particulate sample filter from its holder and place each in a petri dish, and cover.

(13) Allow the engine to soak for 20 ± 1 minutes.

(14) Prepare the engine and dynamometer for the hot start test.

(15) Connect evacuated sample collection bags to the dilute exhaust and dilution air sample collection systems.

(16) Start the CVS (if not already on), the sample pumps (except the diesel particulate sample pump(s), if applicable), the temperature recorder,

the engine cooling fan(s) and any data collection system (i.e., chart recorders, computers, data loggers, etc.). The heat exchanger of the constant volume sampler (if used) and the heated components of any continuous sampling system(s) (if applicable) shall be preheated to their respective operating temperatures before the test begins. See § 86.1340-86(e) for continuous sampling procedures.

(17) Adjust the sample flow rates to the desired flow rate and set the CVS gas flow measuring devices to zero.

Note.—CFV-CVS sample flow rate is fixed by the venturi design.

(18) Carefully install a clean particulate filter into each of the filter holders for diesel tests. The filters must be handled only with forceps or tongs. Rough or abrasive filter handling will result in erroneous weight determination.

(19) Follow the manufacturer's choke and throttle instruction for hot starting. Simultaneously start the engine and begin exhaust and dilution air sampling. For diesel engines, turn on the hydrocarbon analyzer system integrator, mark the recorder chart, and turn on the particulate sample pump(s).

(20) As soon as it is determined that the engine is started, start a "free idle" timer.

(21) Allow the engine to idle freely with no-load for 24 ± 1 seconds. The provisions and interpretations of step (a)(8) of this section apply.

(22) Begin the transient engine cycle such that the first non-idle record of the cycle occurs at 25 ± 1 seconds. The free idle is included in the 25 ± 1 seconds.

(23) On the last record of the cycle cease sampling. For diesel engines, simultaneously turn off gas flow measuring device(s) and the diesel hydrocarbon integrator, mark the hydrocarbon recorder chart, and turn off the particulate sample pump(s).

(24) As soon as possible transfer the "hot start cycle" exhaust and dilution air bag samples to the analytical system and process the samples according to § 86.1340-86 obtaining a stabilized reading of the exhaust sample on all analyzers within 20 minutes of the end of the sample collection phase of the test.

(25) For diesel engines, carefully remove each particulate sample filter from its holder and place each in a clean petri dish and cover as soon as possible. Within one hour after the end of the hot start phase of the test, transfer the four particulate filters to the weighing chamber for post-test conditioning.

(26) The CVS and the engine may be turned off, if desired.

(b) The procedure in paragraph (a) of this section is designed for one sample bag for the cold start portion and one for the hot start portion. It is permissible to use 4 sample bag per test portion. The bags shall sample for the portion of the cycle as indicated below:

Bag No.	Sample time	
	Gasoline-fueled	Diesel
1	272	297
2	579	597
3	895	902
4	1167	1199

41. A new § 86.1338-86 is added and reads as follows:

§ 86.1338-86 Emission measurement accuracy.

(a) Measurement accuracy for analysis systems used for bag measurements.

(1) Good engineering practice would dictate that analyzer readings below 15 percent of full scale chart deflection should generally not be used.

(2) Some high resolution read-out systems such as computers, data loggers, etc., can provide sufficient accuracy and resolution below 15 percent of full scale. Such systems may be used provided that additional calibration bottles are added to insure that the calibration curves below 15 percent of full scale, in the region of the sample measurements, conforms to the accuracy specifications in § 86.1316-86 through § 86.1326-86.

(b) Measurement accuracy for analysis systems used for continuous measurement systems.

(1) Analyzers used for continuous analysis must be operated such that the integrated concentration value over the test cycle falls between 15 and 100 percent of full scale chart deflection. Exceptions to these limits are:

(i) The analyzer's response may be less than 15 percent or more than 100 percent of full scale if automatic range change circuitry is used and the limits for range changes are between 15 and 100 percent of full-scale chart deflection;

(ii) The analyzer's response may be less than 15 percent of full scale if:

(A) Alternative (a)(2) of this section is used to insure that the accuracy of the calibration curve is maintained below 15 percent; or

(B) The full-scale value is 155 ppmC or less; or

(C) The emissions from the engine are erratic and the integrated chart deflection value is greater than 15 percent of full scale; or

(D) The contribution of all data read below the 15 percent level is less than 10 percent by mass of the final test results.

(iii) During engine start-up the HC analyzer is allowed to "spike" off-scale for a maximum of 5 seconds.

42. A new § 86.1339-86 is added and reads as follows:

§ 86.1339-86 Diesel particulate filter handling and weighing.

(a) At least 1 hour, but not more than 80 hours before the test, place each filter in an open, but protected, petri dish and place in the weighing chamber which meets the humidity and temperature specifications of § 86.1312-86.

(b) At the end of the 1 to 80 hour stabilization period, weigh the filter on a balance having a precision of one microgram. Record this weight. This reading is the tare weight.

(c) The filter shall then be stored in a covered petri dish which shall remain in the weighing chamber until needed for testing.

(d) If the filter is not used within one hour of its removal from the weighing chamber, it shall be re-weighed.

(e) After the test, and after the sample filter is returned to the weighing room, condition it for at least 1 hour but not more than 80 hours. Then weigh a second time. This latter reading is the gross weight of the filter. Record this weight.

(f) The net weight (M_w) is the gross weight minus the tare weight.

Note.—Should the sample on the filter contact the petri dish or any other surface, the test is void and must be re-run.

43. A new § 86.1340-86 is added and reads as follows:

§ 86.1340-86 Exhaust sample analysis.

(a) The analyzer response may be read by automatic data collection (ADC) equipment such as computers, data loggers, etc. If ADC equipment is used the following is required.

(1) For bag analysis the analyzer response must be stable at greater than 99 percent of final reading. A single value representing the average chart deflection over a 10 second stabilized period may be stored.

(2) For continuous analysis systems, the ADC system must store at least 5 chart deflection readings per second.

(3) The chart deflections in (a) (1) and (2) of this section may be stored on long term computer storage devices such as computer tapes, storage discs, punch cards, or they may be printed in a listing for storage. In either case a chart recorder is not required and records from a chart recorder, if they exist, need not be stored.

(4) If the data from ADC equipment is used as permanent records, the ADC equipment and the analyzer values as interpreted by the ADC equipment are subject to the calibration specifications in §§ 86.1316-86 through 86.1326-86, as if the ADC equipment were part of the analyzer.

(b) Data records from any one or a combination of analyzers may be stored as chart recorder records.

(c) *Software zero and span.* (1) The use of "software" zero and span is permitted. The process of software zero and span refers to the technique of initially adjusting the analyzer zero and span responses to the calibration curve values, but for subsequent zero and span checks the analyzer response is simply recorded without adjusting the analyzer gain. The observed analyzer response recorded from the subsequent check is mathematically corrected back to the calibration curve values for zero and span. The same mathematical correction is then applied to the analyzer's response to a sample of exhaust gas in order to compute the true sample concentration.

(2) The maximum amount of software zero and span mathematical correction is ± 10 percent of full scale chart deflection.

(3) Software zero and span may be used to switch between ranges without adjusting the gain of the analyzer.

(4) The software zero and span technique may not be used to mask analyzer drift. The observed chart deflection before and after a given time period or event shall be used for computing the drift. Software zero and span may be used after the drift has been computed to mathematically adjust any span drift so that the "after" span check may be transformed into the "before" span check for the next segment.

(d) For bag sample analysis perform the following sequence:

(1) Warm-up and stabilize the analyzers.

(2) Clean and/or replace filter elements, conditioning columns (if used), etc., as necessary.

(3) The order of steps (1) and (2) may be interchanged.

(4) Obtain a stable zero reading.

(5) Zero and span the analyzers with zero and span gases. The span gases shall have concentrations between 75 and 100 percent of full scale chart deflection. The flow rates and system pressures during spanning shall be approximately the same as those encountered during sampling.

(6) Re-check zero response, repeat paragraphs (d)(4) and (d)(5) of this

section or use software zero and span if necessary.

(7) If a chart recorder is used, identify the most recent zero and span response as the pre-analysis values.

(8) If ADC equipment is used, electronically record the most recent zero and span response as the pre-analysis values.

(9) Measure HC (except diesels), CO, CO₂, and NO_x concentrations in the sample bag(s) with approximately the same flow rates and pressures used in paragraph (d)(5) of this section. Constituents measured continuously do not require bag analysis.

(10) Rechecking of the zero and span point after the analysis of the bag is permitted. The number of bags that may be analyzed after pre-analysis values for zero and span have been determined is not specified. The limiting criteria on the time span or the number of events that may occur between the pre-analysis and post-analysis zero span checks are the following:

(i) A pre-analysis zero and span value for each range of each constituent to be analyzed must be determined and identified or recorded prior to analyzing the bag. The bag may be sampled in order to identify the specific range required prior to the determination of the pre-analysis values.

(ii) A post-analysis zero and span check for each range used must be performed and the values recorded. The time interval or the number of events that may occur between the pre and post checks is not specified. However, the difference between pre-analysis zero and span values (recorded in step (7) and (8)) versus those recorded for the post-analysis check may not exceed the zero drift limit or the span drift limit of 2 percent of full scale chart deflection for any range used.

(iii) The time span between the pre and post checks may be no longer than the time period that was used to evaluate the analyzer drift performance.

(11) Analyze the remaining sample and background bags as outlined in steps (4) through (10).

(e) For continuous sample analysis perform the following sequences:

(1) Warm-up and stabilize the analyzers.

(2) Clean and/or replace filter elements, conditioning columns (if used) etc., as necessary.

(3) The order of steps (1) and (2) may be interchanged.

(4) Leak check portions of the sampling system that operate under a vacuum when sampling.

(5) Allow heated sample lines, filters, pumps, etc., to stabilize at operating temperature.

(6) The order of steps (4) and (5) may be interchanged.

(7) Obtain a stable zero reading.

(8) Zero and span each range to be used on each analyzer used prior to the beginning of the cold cycle. The span gases shall have a concentration between 75 and 100 percent of full scale chart deflection. The flow rates and system pressures shall be approximately the same as those encountered during sampling.

(9) Re-check zero response, repeat steps (7) and (8) or use software zero and span if necessary.

(10) If a chart recorder is used, identify the most recent zero and span response as the pre-analysis values.

(11) If ADC equipment is used, electronically record the most recent zero and span response as the pre-analysis values.

(12) Measure the emissions (HC required for diesels, NO_x, CO, CO₂ optional) continuously during the cold start cycle. Indicate the start of the test, the range(s) used, and the end of the test on the recording medium (chart paper or ADC equipment). Use approximately the same flow rates and system pressures used in step (8).

(13) Collect background HC, CO, CO₂, and NO_x in a sample bag.

(14) Perform a post-analysis zero and span check for each range at the conditions specified in step (8).

(15) Neither the zero drift nor the span drift between the pre-analysis and post-analysis checks on any range used may exceed 3 percent for HC or 2 percent for NO_x, CO, and CO₂ of full scale chart deflection, or the test is void.

(16) Determine HC background levels for the cold start cycle by introducing a sample from the background bag into the overflow HC span system.

(17) Determine background levels of NO_x, CO, or CO₂ (if necessary) by the technique outlined in paragraph (e) of this section. The continuous analyzers may be used for analysis under paragraph (e).

Note.—For a quality control check on diesel HC, compare an analysis of a background bag to a continuous analysis of background air sampled through the total hydrocarbon probe. For best results, the difference should be less than 1 percent on the average (time integrated) dilute hydrocarbon emission level during the test.

(18) Repeat steps (7) through (17) for the hot cycle. The post-analysis zero and span check for the cold start (or previous hot start) cycle may be used for the pre-analysis zero and span for the following hot start cycle.

(19) If the HC drift is greater than 3 percent of full-scale chart deflection, hydrocarbon hang-up is suspected.

(f) HC hang-up. If the HC hang-up is suspected, the following sequence may be performed.

(1) Fill a clean sample bag with zero gas.

(2) Zero and span the HFID with the overflow system.

(3) Analyze the sample bag through the overflow sample system.

(4) Analyze the sample bag on another FID or HFID meeting the specification of this Subpart or 40 CFR, Subpart D that does not have a hang-up problem.

(5) If the difference between the readings obtained is 3 percent or more of the HFID full scale, disconnect probe and clean same. (Soaking with sulfuric acid has proven effective.) Clean sample line also. (Heating to 450° F and flow nitrogen gas continuously for 12 hours has proven useful.)

(6) Reassemble the sample system, heat to specified temperature, and repeat the procedure in (1) through (6) above.

44. A new § 86.1341-86 is added and reads as follows:

§ 86.1341-86 Test cycle validation criteria.

(a) To reduce errors between the feedback and reference (cycle trace) values the engine speed and torque feedback signals may be shifted a maximum of ± 5 seconds with respect to the reference speed and torque traces. If the feedback signals are shifted, both speed and torque must be shifted the same amount in the same direction.

(b) Calculate the brake horsepower for each pair of engine speed and torque values recorded. Also calculate the reference brake horsepower for each pair of engine speed and torque reference values. Calculations shall be to five significant digits.

(c) Linear regressions of feedback value on reference value shall be performed for speed, torque and brake horsepower. The method of least-square shall be used. The equation shall have the form:

$$y = mx + b$$

Where:

y = The feedback (actual) value of speed (in RPM), Torque (in ft-lbs.), or brake horsepower.

m = Slope of the regression line.

x = The reference value (speed, torque, or brake horsepower).

b = The y intercept of the regression line.

(d) The standard error of estimate (SE) of y on x and the coefficient of determination (r^2) shall be calculated for each regression line.

(e) For a valid test the criteria in Figure N86-14 must be met for both cycles (cold start and hot start) individually. Deletions from the regression analysis are permitted where allowed in Figure N86-14.

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REGRESSION LINE TOLERANCES

	SPEED	TORQUE	BRAKE HORSEPOWER
STANDARD ERROR OF ESTIMATE (SE) OF Y ON X	100 RPM	13% OF MAXIMUM ENGINE TORQUE	8% OF MAXIMUM BRAKE HORSEPOWER
SLOPE OF THE REGRESSION LINE, M	0.970-1.030	0.83-1.03 HOT 0.77-1.03 COLD	0.89-1.03 (HOT) 0.87-1.03 (COLD)
COEFFICIENT OF DETERMINATION, R ²	0.9700 _{1/}	0.8800 (HOT) _{1/} 0.8500 (COLD) _{1/}	0.9100 _{1/}
Y INTERCEPT OF THE REGRESSION LINE, B	± 50 RPM	± 15 FT. LBS.	± 5.0 OF BRAKE HORSEPOWER
_{1/} MINIMUM			

PERMITTED POINT DELETIONS FROM REGRESSION ANALYSIS

CONDITION	POINTS TO BE DELETED
FIRST 24 SECONDS (± 1) OF FREE IDLE OF HOT AND COLD CYCLES	SPEED, TORQUE, BRAKE HORSEPOWER
WIDE OPEN THROTTLE { SPEED CONTROL: TORQUE FEEDBACK < TORQUE REFERENCE } TORQUE CONTROL: SPEED FEEDBACK < SPEED REFERENCE }	TORQUE, BRAKE HORSEPOWER SPEED, BRAKE HORSEPOWER
SPEED CONTROL, CLOSED THROTTLE, TORQUE REFERENCE < ZERO	TORQUE, BRAKE HORSEPOWER
GASOLINE FUELED ENGINES EQUIPPED WITH AUTOMATIC CHOKES; FIRST 150 SECONDS OF COLD CYCLE OR FIRST 30 SECONDS OF HOT CYCLE, CLOSED THROTTLE AND: MANUAL TRANSMISSION, IF TORQUE FEEDBACK A. IS EQUAL TO ZERO (± 10 FT. LBS.) OR; B. AUTOMATIC TRANSMISSION, IF TORQUE FEEDBACK IS EQUAL TO CURB IDLE TRANSMISSION TORQUE (± 10 FT. LBS.)	SPEED BRAKE HORSEPOWER SPEED BRAKE HORSEPOWER

FIGURE N86-14

(f) The integrated brake horsepower-hour for each cycle (cold and hot start) shall be between -15 percent and +5 percent of the integrated brake horsepower-hour for the reference cycle or the test is void. All torque and speed data points must be used to calculate the integrated brake horsepower-hour. For the purposes of this calculation, negative torque values (i.e., motoring horsepower) shall be set equal to zero and included.

(g) If a dynamometer test run is determined to be statistically or experimentally void, corrective action shall be taken. The engine shall then be allowed to cool (naturally or forced) and the dynamometer test rerun per § 86.1337-86.

45. A new § 86.1342-86 is added and reads as follows:

§ 86.1342-86 Calculations; exhaust emissions.

(a) The final reported transient emission test results shall be computed by use of the following formula:

$$A_{wm} = \frac{1/7(g_c) + 6/7(g_h)}{1/7(\text{BHP-Hr}_c) + 6/7(\text{BHP-Hr}_h)}$$

Where:

A_{wm} = Weighted mass emission level (HC, CO, CO₂, NO_x or particulate (diesel only)) in grams per brake horsepower hour.

g_c = Mass emission level in grams, measured during the cold start test.

g_h = Mass emissions level in grams, measured during the hot start test.

BHP-Hr_c = Total brake horsepower-hour (brake horsepower integrated with respect to time) for the cold start test.

BHP-Hr_h = Total brake horsepower-hour (brake horsepower integrated with respect to time) for the hot start test.

(1) The mass of each pollutant for the cold start test and the hot start test for bag measurements and diesel heat exchanger sample system measurements is determined from the following equations:

(i) Hydrocarbon mass:

$$\text{HC}_{\text{mass}} = V_{\text{mix}} \times \text{Density}_{\text{HC}} \times (\text{HC}_{\text{conc}} / 1,000,000)$$

(ii) Oxides of nitrogen mass:

$$\text{NO}_x_{\text{mass}} = V_{\text{mix}} \times \text{Density}_{\text{NO}_2} \times K_H \times (\text{NO}_x_{\text{conc}} / 1,000,000)$$

(iii) Carbon monoxide mass:

$$\text{CO}_{\text{mass}} = V_{\text{mix}} \times \text{Density}_{\text{CO}} \times (\text{CO}_{\text{conc}} / 1,000,000)$$

(iv) Carbon dioxide mass:

$$\text{CO}_{2\text{mass}} = V_{\text{mix}} \times \text{Density}_{\text{CO}_2} \times (\text{CO}_{2\text{conc}} / 100)$$

(v) Diesel particulate mass:

$$P_{\text{mass}} = [V_{\text{mix}} + V_{\text{Sf}}] \times \frac{P_f}{V_{\text{Sf}}}$$

(2) The mass of each pollutant for the cold start test and the hot start test for flow compensated sample systems is

determined from the following equations:

$$(i) \text{ HC}_{\text{mass}} = \frac{\sum_{i=1}^n [(\text{HC}_e)_i \times (\dot{V}_{\text{mix}})_i \times (\text{Density HC}) \times \Delta T]}{10^6} \\ - \frac{\text{HC}_d}{10^6} \left(1 - \frac{1}{\text{DF}}\right) \times V_{\text{mix}} \times \text{Density HC}$$

$$(ii) \text{ NOx}_{\text{mass}} = \frac{\sum_{i=1}^n [(\text{NOx}_e)_i \times (\dot{V}_{\text{mix}})_i \times (\text{Density NO}_2) \times \Delta T]}{10^6} \\ - \frac{\text{NOx}_d}{10^6} \left(1 - \frac{1}{\text{DF}}\right) \times V_{\text{mix}} \times \text{Density NO}_2$$

$$(iii) \text{ CO}_{\text{mass}} = \frac{\sum_{i=1}^n [(\text{CO}_e)_i \times (\dot{V}_{\text{mix}})_i \times (\text{Density CO}) \times \Delta T]}{10^6} \\ - \frac{\text{CO}_d}{10^6} \left(1 - \frac{1}{\text{DF}}\right) \times V_{\text{mix}} \times \text{Density CO}$$

$$(iv) \text{ CO}_2_{\text{mass}} = \frac{\sum_{i=1}^n [(\text{CO}_2)_e)_i \times (\dot{V}_{\text{mix}})_i \times (\text{Density CO}_2) \times \Delta T]}{10^6} \\ - \frac{\text{CO}_2_d}{10^6} \left(1 - \frac{1}{\text{DF}}\right) \times V_{\text{mix}} \times \text{Density CO}_2$$

(3) Meaning of symbols:

(i) HC_{mass} = Hydrocarbon emissions, in grams per test phase.

$\text{Density}_{\text{HC}}$ = Density of hydrocarbons is 16.33 g/ft³ (.5768 kg/m³), assuming an average carbon to hydrogen ratio of 1:1.85, at 68°F (20°C) and 760 mm Hg (101.3 kPa) pressure.

HC_{conc} = Hydrocarbon concentration of the dilute exhaust sample corrected for background, in ppm carbon equivalent, i.e., equivalent propane X 3.

$\text{HC}_{\text{conc}} = \text{HC}_e - \text{HC}_d [1 - (1/\text{DF})]$

Where:

HC_e = Hydrocarbon concentration of the dilute exhaust bag sample or, for diesel heat exchanger systems, average hydrocarbon concentration of the dilute exhaust sample as calculated from the integrated HC traces, in ppm carbon equivalent. For flow compensated

sample systems (HC_e), is the instantaneous concentration.

HC_d = Hydrocarbon concentration of the dilution air as measured, in ppm carbon equivalent.

(ii) NOx_{mass} = Oxides of nitrogen emissions, in grams per test phase.

$\text{Density}_{\text{NO}_2}$ = Density of oxides of nitrogen is 54.16 g/ft³ (1.913 kg/m³), assuming they are in the form of nitrogen dioxide, at 68°F (20°C) and 760 mm Hg (101.3 kPa) pressure.

NOx_{conc} = Oxides of nitrogen concentration of the dilute exhaust sample corrected for background, in ppm.

$\text{NOx}_{\text{conc}} = \text{NOx}_e - \text{NOx}_d [1 - (1/\text{DF})]$

Where:

NOx_e = Oxides of nitrogen concentration of the dilute exhaust bag sample as measured, in ppm. For flow compensated sample systems (NOx_e), is the instantaneous concentration.

NOx_d = Oxides of nitrogen concentration of the dilute air as measured, in ppm.

(iii) CO_{mass} = Carbon monoxide emissions, in grams per test phase.

$\text{Density}_{\text{CO}}$ = Density of carbon monoxide is 32.97 g/ft³ (1.164 kg/m³), at 68°F (20°C) and 760 mm Hg (101.3 kPa) pressure.

CO_{conc} = Carbon monoxide concentration of the dilute exhaust sample corrected for background, water vapor, and CO₂ extraction, in ppm.

$\text{CO}_{\text{conc}} = \text{CO}_e - \text{CO}_d [1 - (1/\text{DF})]$

Where:

CO_e = Carbon monoxide concentration of the dilute exhaust bag sample volume corrected for water vapor and carbon dioxide extraction, in ppm. For flow compensated sample systems (CO_e), is the instantaneous concentration. The calculation assumes the carbon to hydrogen ratio of the fuel is 1:1.85.

$\text{CO}_e = [1 - 0.01925\text{CO}_{2e} - 0.000323\text{R}]\text{CO}_{\text{em}}$

Where:

CO_{em} = Carbon monoxide concentration of the dilute exhaust sample as measured, in ppm.

CO_{2e} = Carbon dioxide concentration of the dilute exhaust bag sample, in percent. For flow compensated sample systems (CO_{2e}), is the instantaneous concentration.

R = Relative humidity of the dilution air, in percent (see § 86.1342-86(a)(5)).

CO_d = Carbon monoxide concentration of the dilution air corrected for water vapor extraction, in ppm.

$\text{CO}_d = (1 - 0.000323\text{R})\text{CO}_{\text{em}}$

Where:

CO_{em} = Carbon monoxide concentration of the dilution air sample as measured, in ppm.

Note.—If a CO instrument which meets the criteria specified in § 86.1311-86 is used and the conditioning column has been deleted, CO_{em} can be substituted directly for CO_e and CO_{em} can be substituted directly for CO_d .

(iv) $\text{CO}_2_{\text{mass}}$ = Carbon dioxide emissions, in grams per test phase.

$\text{Density}_{\text{CO}_2}$ = Density of carbon dioxide is 51.85 g/ft³ (1.843 kg/m³), at 68°F (20°C) and 760 mm Hg (101.3 kPa) pressure.

$\text{CO}_{2\text{conc}}$ = Carbon dioxide concentration of the dilute exhaust sample corrected for background, in percent.

$\text{CO}_{2\text{conc}} = \text{CO}_{2e} - \text{CO}_{2d} [1 - (1/\text{DF})]$

Where:

CO_{2e} = Carbon dioxide concentration of the dilution air as measured, in percent.

(v) P_{mass} = Mass of particulate determined in grams per test phase.

P_t = Mass of particulate per test on the exhaust filter (or filters if the back-up filter is required. See § 86.1310-86(c) for determination), grams.

V_{st} = Total volume of sample removed from the primary dilution tunnel, cubic feet at standard conditions.

(a) For a single-dilution system:

$$V_{df} = \frac{V_{as} \times (P_B + P_{is}) \times 528^\circ R}{T_{is} \times 760 \text{ mmHg}}$$

Where:

V_{as} = actual volume of dilute sample removed from the primary-dilution tunnel, cubic feet.

P_B = barometric pressure, mmHg.

P_{is} = pressure elevation above ambient measured at the inlet to the dilute exhaust sample gas meter or flow instrumentation, mmHg. For most gas meters or flow instruments with unrestricted discharge P_{is} is negligible and can be assumed = 0.

T_{is} = average temperature of the dilute exhaust sample at the inlet to the gas meter or flow instrumentation, °R.

Note.— V_{df} may require correction according to § 86.1320-86(f).

(b) For a double-dilution system:

$$V_{df} = V_{df}$$

Where:

$$V_{df} = V_{df} \times (P_B + P_{is}) \times 528^\circ R / T_{is} \times 760 \text{ mmHg}$$

V_{df} = actual volume of double diluted sample which passed through the particulate filter, cubic feet.

P_B = barometric pressure, mmHg.

P_{is} = pressure elevation above ambient measured at the inlet to the sample gas meter located at the exit side of the secondary dilution tunnel, mmHg. For most meters with unrestricted discharge P_{is} is negligible and can be assumed = 0.

T_{is} = Average temperature of the dilute exhaust sample at the inlet to the exit side gas meter or flow instrumentation, °R.

$$V_{df} = V_{df} \times (P_B + P_{is}) \times 528^\circ R / T_{is} \times 760 \text{ mmHg}$$

V_{df} = actual volume of secondary dilution air, cubic feet.

P_B = barometric pressure, mmHg.

P_{is} = pressure elevation above ambient measured at the inlet to the sample gas meter or flow instrumentation located at the inlet side of the secondary dilution tunnel, mmHg. For most gas meters with unrestricted discharge P_{is} is negligible and can be assumed = 0.

T_{is} = Average temperature of the dilute exhaust sample at the inlet to the inlet side gas meter or flow instrumentation, °R.

Note.—Both V_{df} and V_{df} may require correction according to § 86.1320-86(f). These corrections must be applied before V_{df} is determined.

Note.—The background particulate level inside the dilution air filter box at EPA is very low. This particulate level will be assumed = 0, and background particulate samples will not be taken with each exhaust sample. It is recommended that background particulate checks be made periodically to verify the low level. Any manufacturer may make the same assumption without prior EPA approval.

$$(vi) DF = 13.4 / [CO_{2a} + (HC_a + CO_a) \times 10^{-4}] \times K_H + \text{Humidity correction factor.}$$

For gasoline engines:

$$K_H = 1 / [1 - 0.0047(H - 75)] \text{ (or for SI units } = 1 / [1 - 0.0329(H - 10.71)])$$

For diesel engines:

$$K_H = 1.$$

Where:

H = Absolute humidity in grains (grams) of water per pound (kilogram) of dry air.

$$H = [(43.478)R_a \times P_a] / [P_B - (P_a \times R_a / 100)] \text{ for SI units, } H = [(6.211)R_a \times P_a] / [P_B - (P_a \times R_a / 100)]$$

R_a = Relative humidity of the ambient air, in percent.

P_a = Saturated vapor pressure, in mm Hg (kPa) at the ambient dry bulb temperature.

P_B = Barometric pressure, in mm Hg (kPa).

Dt = Time interval (in seconds) between samples in flow compensated systems (0.2 seconds maximum).

V_{mix} = Total dilute exhaust volume in cubic feet per test phase corrected to standard conditions (528°R (293°K) and 760 mm Hg (101.3 kPa)).

($V_{mix,h}$) = Instantaneous dilute exhaust volumetric flow rate (for compensated flow systems), in cubic feet per second.

For PDP-CVS, V_{mix} is:

$$V_{mix} = V_o \times \frac{N(P_B - P_a)(528^\circ R)}{(760 \text{ mm Hg})(T_p)}$$

for SI units,

$$V_{mix} = V_o \times \frac{N(P_B - P_a)(293.15^\circ K)}{(101.3 \text{ kPa})(T_p)}$$

Where:

V_o = Volume of gas pumped by the positive displacement pump, in cubic feet (cubic metres) per revolution. This volume is dependent on the pressure differential across the positive displacement pump.

N = Number of revolutions of the positive displacement pump during the test phase while samples are being collected.

P_B = Barometric pressure, in mm Hg (kPa).

P_a = Pressure depressions below atmospheric measured at the inlet to the positive displacement pump, in mm Hg (kPa) (during an idle mode).

T_p = Average temperature of dilute exhaust entering positive displacement pump during test, °R (°K).

(b) Sample calculation of mass values of exhaust emissions:

(1) Assume the following test results for a gasoline engine:

	Cold start cycle test results	Hot start cycle test results
V_{mix}	6924 ft ³	6873 ft ³
R	30.2%	30.2%
R_a	30.2%	30.2%
P_a	735 mm Hg	735 mm Hg
P_B	22.676 mm Hg	22.676 mm Hg
HC _{conc}	132.07 ppm C equiv.	86.13 ppm C equiv.
NO _x	7.86 ppm	10.98 ppm
CO _{conc}	171.22 ppm	114.28 ppm
CO _{2a}	.178%	.381%
HC _{2a}	3.60 ppm C equiv.	8.70 ppm C equiv.
NO _x	0.0 ppm	0.10 ppm
CO _{2a}	0.89 ppm	0.89 ppm
CO _{2a}	0.0%	0.38%
BHP-HR	0.259	0.347

Then:

Cold Start Test

$$H = [(43.478)(30.2)(22.676)] / [735 - (22.676)(30.2)/100] = 41 \text{ grains of water per pound of dry air.}$$

$$K_H = 1 / [1 - 0.0047(41 - 75)] = 0.862$$

$$CO_{2a} = [1 - 0.01925(.178) - 0.000323(30.2)]171.22 = 169.0 \text{ ppm}$$

$$CO_{2a} = [1 - 0.000323(30.2)]0.89 = .881 \text{ ppm}$$

$$DF = 13.4 / [.178 + (132.1 + 169.0)(10^{-4})] = 64.392$$

$$HC_{conc} = 132.1 - 3.6[1 - (1/64.265)] = 128.6 \text{ ppm}$$

$$HC_{mass} = 6924(128.6) / [128.6 / (1,000,000)] = 14.53 \text{ grams}$$

$$NO_{x,conc} = 7.86 - 0.0[1 - (1/64.265)] = 7.86 \text{ ppm}$$

$$NO_{x,conc} = 6924(7.86) / [7.86 / (1,000,000)] = 2.54 \text{ grams}$$

$$CO_{conc} = 169.0 - .881[1 - (1/64.265)] = 168.0 \text{ ppm}$$

$$CO_{mass} = 6924(168.0) / [168.0 / (1,000,000)] = 38.35 \text{ grams}$$

$$CO_{2a,conc} = .178 - 0[1 - (1/64.265)] = .178\%$$

$$CO_{2a,conc} = 6924(0.178) / (100) = 639 \text{ grams}$$

Hot Start Test

Assume similar calculations result in the following:

$$HC_{mass} = 8.72 \text{ grams}$$

$$NO_{x,conc} = 3.49 \text{ grams}$$

$$CO_{mass} = 25.70 \text{ grams}$$

$$CO_{2a,conc} = 1228 \text{ grams}$$

(2) Weighted mass emission results:

$$HC_{vm} = \frac{1/7(14.53) + 6/7(8.72)}{1/7(0.259) + 6/7(0.347)} = 28.6 \text{ grams/BHP-HR}$$

$$NO_{x,vm} = \frac{1/7(2.54) + 6/7(3.49)}{1/7(0.259) + 6/7(0.347)} = 10.0 \text{ grams/BHP-HR}$$

$$CO_{vm} = \frac{1/7(38.35) + 6/7(25.70)}{1/7(0.259) + 6/7(0.347)} = 82.2 \text{ grams/BHP-HR}$$

$$CO_{2vm} = \frac{1/7(639) + 6/7(1226)}{1/7(0.259) + 6/7(0.347)} = 3413 \text{ grams/BHP-HR}$$

(c) The final reported brake-specific fuel consumption (BSFC) shall be computed by use of the following formula:

$$BSFC = \frac{1/7(M_c) + 6/7(M_h)}{1/7(BHP-HR_c) + 6/7(BHP-HR_h)}$$

Where:

BSFC = brake-specific fuel consumption in pounds of fuel per brake horsepower-hour (lbs/BHP-HR)

M_c = mass of fuel, in pounds, used by the engine during the cold start test.

M_h = mass of fuel, in pounds, used by the engine during the hot start test.

BHP-HR_c = total brake horsepower-hours (brake horsepower integrated with respect to time) for the cold start test.

BHP-HR_h = total brake horsepower-hours (brake horsepower integrated with respect to time) for the hot start test.

(1) The mass of fuel for the cold start and hot start test is determined from the following equation:

$$M = (G_c/R_c)(1/453.6)$$

(2) Meaning of symbols:

M = Mass of fuel, in pounds, used by the engine during the cold or hot start test.

G_c = Grams of carbon measured during the cold or hot start test.

$$G_c = \{12.011 / (12.011 + \alpha(1.008))\} HC_{mass} + 0.429 CO_{mass} + 0.273 CO_{2mass}$$

Where:

HC_{mass} = Hydrocarbon emissions, in grams for cold or hot start test.

CO_{mass} = Carbon monoxide emissions, in grams for cold or hot start test.

CO_{2mass} = Carbon dioxide emissions, in grams for cold or hot start test.

α = The measured hydrogen to carbon ratio of the fuel.

R_c = The grams of carbon in the fuel per gram of fuel.

$$R_c = 12.011 / [12.011 + \alpha(1.008)]$$

(d) Sample calculation of brake-specific fuel consumption:

(1) Assume the following text results:

	<u>Cold Start Cycle</u> <u>Test Results</u>	<u>Hot Start Cycle</u> <u>Test Results</u>
BHP-HR	6.945	7.078
α	1.85	1.85
HC _{mass}	37.08 grams	28.82 grams
CO _{mass}	357.69 grams	350.33 grams
CO _{2mass}	5419.62 grams	5361.32 grams

Then:

$$G_s \text{ for cold start test} = [12.011 / (12.011 + (1.85)(1.008))](37.08) + 0.429(357.69) + 0.273(5419.62) = 1665.10 \text{ grams}$$

$$G_s \text{ for hot start test} = [12.011 / (12.011 + (1.85)(1.008))](28.82) + 0.429(350.33) + 0.273(5361.32) = 1638.88 \text{ grams}$$

$$R_2 = 12.011 / [12.011 + 1.85(1.008)] = .866$$

$$M_c = (1665.10 / .866)(1/453.6) = 4.24 \text{ lbs.}$$

$$M_H = (1638.88 / .866)(1/453.6) = 4.17 \text{ lbs.}$$

(2) Brake-specific fuel consumption results:

$$BSFC = \frac{1/7(4.24) + 6/7(4.17)}{1/7(6.945) + 6/7(7.078)} = .592 \text{ lbs. of fuel/BHP-HR}$$

46. A new § 86.1343-86 is added and reserved as follows:

§ 86.1343-86 [Reserved]

47. A new § 86.1344-86 is added and reads as follows:

§ 86.1344-86 Required information.

(a) The required test data shall be grouped into the following three general categories:

(1) Engine set-up and descriptive data. This data must be provided to the EPA supervisor of engine testing for each engine sent to the Administrator for confirmatory testing prior to the initiation of engine set-up. This data is necessary to insure that EPA test personnel have the correct data in order to set up and test the engine in a timely and proper manner. This data is not required for tests performed by the manufacturers.

(2) Pre-test data. This data is general test data that must be recorded for each test. The data is of a more descriptive nature such as identification of the test engine, test site number, etc. As such, this data can be recorded at any time within 24 hours of the test.

(3) Test-data. This data is physical test data that must be recorded at the time of testing.

(b) All data may be supplied to the Administrator by punch cards, magnetic tape, or other electronic data processing means. Acceptable data formats and transmission techniques will be provided in the Application Format for Certification of the applicable Model Year.

(c) Engine set-up data. Because the specific test facilities may change somewhat with time, the specific data parameters and number of items may vary slightly. The Application Format for Certification for the applicable Model Year will specify the exact requirements. In general, the following type of data will be required:

- (1) Engine manufacturer.
- (2) Engine system combination.
- (3) Engine code and CID.
- (4) Engine identification number.
- (5) Applicable engine model year.
- (6) Engine fuel type.
- (7) Recommended oil type.
- (8) Exhaust pipe configuration pipe sizes, etc.
- (9) Curb idle speed.
- (10) Dynamometer idle speed.
- (Automatic transmission engines only.)
- (11) Engine parameter specifications such as spark timing, operating temperature, advance curves, etc.
- (12) Engine performance data such as, maximum BHP, rated speed, fuel flow, governed speed, etc.
- (13) Recommended start-up procedure.

(14) Maximum safe engine operating speed.

(15) Number of hours of operation accumulated on engine.

(16) Manufacturer's recommended inlet depression limit and typical in-use inlet depression level.

(17) Exhaust system.

(i) *Diesel engines.* (A) Header pipe inside diameter.

(B) Tailpipe inside diameter.

(C) Minimum distance in-use between the exhaust manifold flange and the exit of the chassis exhaust system.

(D) Manufacturer's recommended maximum exhaust back pressure limit for the engine.

(E) Typical back pressure as determined by the maximum back pressure application of the engine.

(F) Minimum back pressure required to meet applicable noise regulations.

(ii) *Gasoline-fueled engines.* Typical in-use back pressure in vehicle exhaust system.

(d) Pre-test data. The following data shall be recorded, and reported to the Administrator for each test conducted for Compliance with the provisions of 40 CFR 86, Subpart A:

- (1) Engine-system combination.
- (2) Engine identification.
- (3) Instrument operator(s).
- (4) Engine operator(s).
- (5) Number of hours of operation accumulated on the engine prior to beginning the test sequence (Figure N86-12).

(6) Fuel identification with average of test fuel used.

(7) Date of most recent analytical assembly calibration.

(8) All pertinent instrument information such as tuning, gain, serial numbers, detector number, calibration curve number, etc. As long as this information is traceable, it may be summarized by system number or analyzer identification numbers.

(e) *Test data.* The physical parameters necessary to compute the test results and insure accuracy of the results shall be recorded for each test conducted for compliance with the provisions of 40 CFR 86, Subpart A. Additional test data may be recorded at the discretion of the manufacturer. Extreme details of the test measurements such as analyzer chart deflections will generally not be required on a routine basis to be reported to the Administrator for each test, unless a dispute about the accuracy of the data arises. The following type of data shall be required to be reported to the Administrator. The Application Format for Certification for the applicable Model Year will specify the exact requirements which may change

slightly from year to year with the addition or deletion of certain items.

- (1) Date and time of day.
- (2) Test number.
- (3) Engine intake air or test cell temperature.
- (4) Barometric pressure.

Note.—A central laboratory barometer may be used; *Provided*, that individual test cell barometric pressure are shown to be within ± 0.1 percent of the barometric pressure at the central barometer location.

(5) Engine intake or test cell and CVS dilution air humidity.

(6) Maximum torque versus speed curve as determined in § 86.1332, with minimum and maximum engine speeds.

(7) Measured maximum horsepower, maximum torque, and rated speeds.

(8) Measured maximum horsepower and torque.

(9) High idle engine speed (diesel engines only).

(10) Fuel consumption at maximum power and torque (diesel engines only).

(11) Curb-idle fuel flow rate.

(12) Cold soak time interval and cool down procedures.

(13) Temperature set point of the heated continuous analysis system components (if applicable).

(14) Test cycle validation criteria as specified in § 86.1341 for each test phase (cold-hot).

(15) Total CVS flow rate with dilution factor for each test phase (cold-hot).

(16) Sample concentrations (background corrected) for HC, CO, CO₂, and NO_x for each test phase (cold-hot).

(17) Brake specific emissions (g/BHP-hr) for HC, CO and NO_x for each test phase (cold-hot).

(18) The weighted (cold-hot) brake specific emissions (g/BHP-hr) for the total test.

(19) The weighted (cold-hot) carbon balance brake specific fuel consumption for the total test.

(20) The number of hours of operation accumulated on the engine after completing the test sequences described in Figure N86-10.

(21) *Additional required records for diesel engines.* (i) Pressure and temperature of the dilute exhaust mixture and secondary-dilution air in the case of a double-dilution system at the inlet to the respective gas meter(s) or flow instrumentation used for particulate sampling.

(ii) The temperature of the dilute exhaust mixture immediately before the particulate filter.

(iii) Gas meter or flow instrument readings at the start of each sample period and at the end of each sample period.

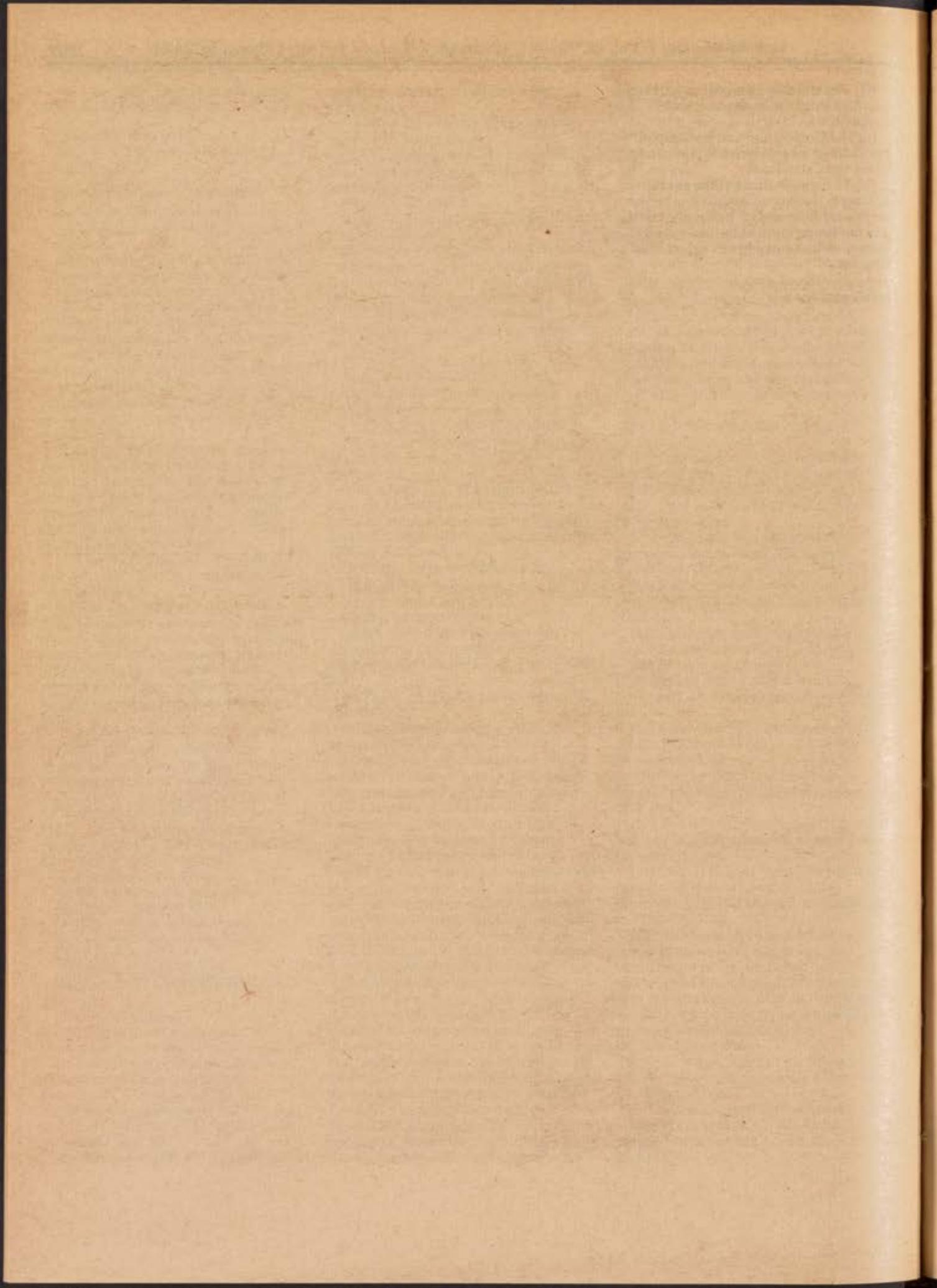
(iv) The stabilized pre-test weight and post-test weight of each particulate sample filter.

(v) The temperature and humidity of the ambient air in which the particulate filters were stabilized.

(vi) The temperatures of the gas (1) flowing in the heated sample line before the heated filter and (2) before the HFID, and the temperature of the control system of the heated hydrocarbon detector.

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federal register

Wednesday
January 7, 1981

Part IV

Postal Service

Privacy Act of 1974; Systems of
Records, Annual Publication

POSTAL SERVICE

Privacy Act of 1974; Systems of Records, Annual Publication

AGENCY: U.S. Postal Service.

ACTION: Annual report and final notice of records system changes.

SUMMARY: The primary purpose of this document is to publish the annual notice under 5 USC 552a(e) (4) of the systems of records, as defined in the Privacy Act of 1974, Pub. L. 93-579, which are maintained by the Postal Service. The full text of the Postal Service's systems of records last appeared at: 43 FR 40122, September 8, 1978, with numerous revisions published at 45 FR 1558, January 7, 1980. (Also see Privacy Act Issuances, 1979 Compilations, Volume IV, p. 3208.) This document publishes in full the systems that the Postal Service has amended since the January 7, 1980, publication and provides the full systems descriptions of those systems that were not published in the January 7, 1980, issue of the Federal Register. It also provides the system numbers and names of those systems that appeared in the January 7, 1980, Federal Register which have not been amended. In summary, the reader has available, in this publication and the January 7 document, the complete text for each Postal Service system of records. This document also provides final notice of several record systems description changes that have recently appeared for public comment in the Federal Register.

DATE: Parts 1, 2, and 3 are effective January 7, 1981.

FOR FURTHER INFORMATION CONTACT: Mr. A. Scott Hamel (202) 245-4142.

SUPPLEMENTARY INFORMATION: Changes to the January 7, 1980, list appeared in the Federal Registers on May 15, 1980 (45 FR 32153), August 1, 1980 (45 FR 51322), August 25, 1980 (45 FR 56483), September 23, 1980 (45 FR 63198), and November 7, 1980 (45 FR 74124).

The Postal Service has determined it is necessary to: (1) publish final notice of the August 1, 1980, August 25, 1980, September 23, 1980 and November 7, 1980 proposals; (2) delete a previously published system from the list of systems of records; and (3) make minor editorial corrections and revisions to the descriptions of several systems of records.

Postal Service regulations concerning the privacy of information appear in 39 CFR 266. Those Postal Service systems of records which are exempt from certain provisions of the Privacy Act are listed in 39 CFR 266.9(b).

Part 1: Final Notice of Prior Proposals

On August 1, 1980, August 25, 1980, September 23, 1980 and November 7, 1980 the Postal Service published for comment in the Federal Register (45 FR 51322, 45 FR 56483, 45 FR 63198 and 45 FR 74124, respectively) notices of several Postal Service systems of records changes. The final notice of the changes follows:

(a) The Postal Service has determined that it is necessary to modify an existing system of records to provide for the collection and maintenance of information that will be used to make lockbox service available in convenient, detached locations to a larger segment of the public. The system will now contain completed questionnaires from members of the public who are interested in expanded lockbox service. The final revisions and the system to which it applies follows:

USPS 010.020, Collection and Delivery Records—Boxholders Records

Categories of individuals covered by the system:

Change to read, "Postal customers who have applied for or expressed an interest in lockbox or caller services, whether for private or public use."

Categories of records in the system:

Change to read, "Records are in printed or card form and contain name, addresses, telephone number, record of payment, lockbox service preference and the names of persons or agents whether family members, business associates, or employees."

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Change routine use No. 2 to read, "2. Disclosed to a Federal, State or local government agency upon prior written certification that the information is required for the performance of its official business."

Storage:

Change to read, "Information is stored on printed or card form filed in metal file cabinets. In locations where the records have been automated, information may be found on magnetic tape, magnetic cards or mylar strips."

Retention and disposal:

Add, "c. Lockbox preference questionnaire forms are retained for six months after termination of survey."

(b) The Postal Service has automated certain portions of three systems to improve their operating efficiency. The

systems affected and the changes to be made are set forth below:

USPS 070.040, Inquiries and Complaints—Customer Complaint Records

Storage:

Change to read, "Records are stored in original typed, printed, handwritten or computer printed form and on magnetic tape."

Safeguards:

Change to read, "Paper records are maintained in closed filing cabinets. Computer records are subject to the security of the computer room."

Retention and disposal:

Change to read, "Records are retained up to a maximum period of two calendar years. All correspondence is retained during the calendar year received, plus one additional year. Paper records are destroyed by burning or shredding. Computer records are destroyed by erasing."

USPS 120.098, Personnel Records—Office of Workers' Compensation Program (OWCP) Records

Categories of records in the system:

Change to read, "Copies of Department of Labor forms consisting of claims and supporting information, Postal Service forms and correspondence related to the claim; automated payment and accounting records."

Storage:

Change to read, "Printed forms and correspondence. (Note.—In some cases, the USPS by agreement with the Department of Labor (DOL), temporarily stores original case files. These files are considered to be DOL records to which DOL rather than USPS regulations apply.) Continuation of pay and DOL chargeback information is stored on computer media."

Retrievability:

Change to read, "Records are retrieved alphabetically by name and social security number."

Safeguards:

Change to read, "Maintained in locked filing cabinets within the exclusive custody of the injury compensation control point. Automated records are protected through computer password security."

Retention and disposal:

Change to read, "OWCP case files are maintained for five years after employee has left the Postal Service, then destroyed."

System manager(s) and address:

Change to read, "APMG, Employee Relations Department, and APMG, Finance Department, Headquarters."

USPS 210.020, Contractor Records—Contract Employee Assignment Records*System name:*

Change to read, "Contract Records, Drivers Screening System."

System location:

Change to read, "Mail Processing Department, Headquarters; Regional Offices; Sectional Centers; Bulk Mail Centers; District Offices; Post Offices; Postal Data Centers; and Transportation Management Offices (TMOs)."

Categories of individuals covered by the system:

Change to read, "Persons under a highway contract with the USPS."

Categories of records in the system:

Change to read, "Name, social security account number and highway contract to which assigned."

Storage:

Change to read, "Originally typed, printed or handwritten form; magnetic tape and computer printed reports."

Retrievability:

Change to read, "Primarily by highway contract and postal locations serviced; secondarily, by individual's social security number and name."

Safeguards:

Change to read, "Through computerized codes and passwords, access is restricted to offices that are the authority for a specific contract and to only those post offices serviced by the contract."

Retention and disposal:

Change to read, "Records are held one year after the contract expires, or one year following an individual's employment termination with a company that has been awarded a highway contract."

Notification procedure:

Change to read, "Contractors wishing to know whether information about them is maintained in this system of records should address inquiries to the TMO Manager. Inquiries should contain full name and highway contract number."

(c) The Postal Service plans to extract and report leave usage information about PAR program participants from its payroll processing system (USPS

050.020). Reports will be distributed to PAR program personnel in order to improve the ability to assess the success of the PAR program. The following constitutes final notice of the necessary changes.

USPS 120.140, Personnel Records—Program for Alcoholic Recovery (PAR)*System location:*

Change to read, "PAR offices, regional headquarters and Postal Data Centers."

Categories of individuals covered by the system:

Change to read, "USPS employees who volunteer for or are referred to the Program."

Storage:

Change to read, "Printed forms and paper files. Sick leave and Leave Without Pay information is stored on computer media."

Safeguards:

Change to read, "These restricted files are maintained in locked file cabinets with limited access to PAR personnel in secured facilities. Automated records are protected through computer password security and encoding of personal identifiers."

Retention and disposal:

Change to read, "1. Case card is destroyed six years following close of case file. 2. Correspondence and reports are destroyed three years (field) or ten years (Headquarters) after close of case file. 3. Historical case records card is destroyed six years after close of case file. 4. Case files are destroyed three years after recovery or one year after participant terminates enrollment. Paper records are destroyed by shredding and computer tape/disk records are destroyed by erasing."

(d) The Postal Service has modified USPS 120.120, Personnel Records—Personnel Research and Test Validation Records and USPS 120.098, Personnel Records—Office of Workers' Compensation (OWCP) Record Copies. For USPS 120.120, the Postal Service has expanded the types of records in the system, has modified the statement of purpose, has added one routine use and deleted an existing routine use "9", and has made other minor changes to the system.*

USPS 120.098 was modified to add a new temporary routine use to allow the Postal Service on a one-time basis to disclose a limited amount of information about plan members to respective Federal health benefit carriers. This information will be used to identify

postal employees who have received compensation payments for the same injury from both the Postal Service and the carriers.

One comment was received objecting to the proposed change in USPS 120.098 and objecting to the proposed adoption of USPS 120.099 (see (e) of this notice). The commenter questioned the right of the Postal Service to secure and store records under the system. The commenter also raised questions about the categories of individuals being limited to employees who have "voluntarily" filed for injury compensation and questioned the meaning of "left the Postal Service" in the retention and disposal of records section.

The purposes and authority for the maintenance of the systems are in consonance with the provision of the Privacy Act 5 U.S.C. 552a(e)(1) which requires that an agency with a system of records maintain in its records only such information about an individual as is relevant and necessary to accomplish a purpose of the agency required by statute or Executive Order. The purposes of USPS 120.098 and USPS 120.099 are to help ensure the efficiency of postal operations, especially in light of concern regarding expenditures under the injury compensation program. Use of the word "voluntarily" was not intended to differentiate between postal employees who have "involuntarily" filed claims for injury compensation since all claims are filed on a voluntary basis. The word "voluntarily" merely points out the nature of involvement in the program. The meaning of "left the Postal Service" in the retention and disposal sections merely refers to an employee, who, for whatever reason, is no longer carried on Postal Service rolls.

(e) This document presents final notice of two new systems of records.

(1) USPS 120.121, Personnel Records—Applicant Race, Sex, National Origin and Disability Status Records. USPS 120.121 has been created to provide the Postal Service with the ability to assess the impact of selection decisions on applicants in each racial, sex, national origin and disability category who take entry level employment examinations; to implement and evaluate USPS affirmative action program in keeping with equal employment opportunity programs requirements under the law, and to identify categories of individuals for personnel records research.

(2) USPS 120.099, Personnel Records—Injury Compensation Payment Validation Records. USPS 120.099 was created to enable the Postal Service to identify employees who receive double compensation payments for the same

injury. See (d) above for a discussion of the comment received on proposed USPS 120.099. The descriptions of the two new systems appear in the list of systems at the end of this document. The changes mentioned above (a)-(e) have been incorporated into the list of systems descriptions at the end of this document.

Part 2: Deletion of a Previously Announced System of Records

Based on review and discussion with the responsible custodian of records within system USPS 120.037, Personnel Records, Grievance and Appeals Records for Bargaining Unit Employees, it was found that the records of this nature are not maintained in a manner that causes them to be retrieved by name or other personal identifiers. Rather, those records are retrieved by grievance case number. Since retrieval of records by some form of personal identification is required to bring them within the Privacy Act's definition of "systems of records", 5 U.S.C. 552a(a)(5), this system should not have been established as a Privacy Act system of records. For this reason, final notice is hereby given of the deletion of system 120.037.

Part 3: Editorial Corrections and Revisions

The Postal Service has also determined it is necessary to make certain editorial corrections and revisions to several systems of records descriptions. These editorial corrections and revisions do not reflect changes in the systems themselves, but are provided only as changes to the descriptions. In many cases, they correct typographic errors. These changes do not affect the general character or purpose of any system described, nor do they expand the population of individuals to which the systems apply. The following constitutes final notice of these changes:

USPS 050.010, Finance Records—Employee travel records (Accounts Payable) 050.010

System name:

Change to read, "Finance Records—Employee Travel Records (Accounts Payable, 050.010.

USPS 050.020, Finance Records—Payroll System, 050.020

Categories of individuals covered by the system:

Change to read, "USPS employees and postmaster relief/replacement employees."

Routine uses of records maintained in the system, including categories of users and the purposes of such uses:

Change routine use No. "20" to read, "20. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit."

USPS 070.040, Inquiries and Complaints—Customer Complaint Records, 070.040

System name:

Change to read, "Inquiries and Complaints—Customer Complaint Records, 070.040.

USPS 090.020, Non-Mail Services—Passport Application Records, 090.020

Notification procedure:

Change to read, "Customers wishing to know whether information about them is maintained in this system of records should address inquiries to the postmaster of the post office where a passport application was made. Inquiries should contain full name and date of application. (NOTE: The original case file is maintained by Department of State and must be requested from that organization as provided for under Department of State Privacy Act systems for passport information.)

USPS 120.130, Personnel Records—Postmaster Selection Program Records, 120.130

System manager(s) and address:

Change to read, "APMG, Employee Relations Department."

USPS 120.180, Personnel Records—Skills Bank (Human Resources) Records, 120.180

Categories of individuals covered by the system:

Change to read, "Skills bank records are maintained on different categories of USPS employees, Women, PCES and employees in various job categories.

Retention and disposal:

Change to read, "Paper records will be destroyed 1 or 2 years after information is successfully entered into the system, depending upon the particular program involved, by shredding or burning. Automated information will be erased 1 year after employee is terminated or is no longer in the particular job category."

Record source categories.

Change to read, "Information is obtained directly from employee and USPS personnel forms and reports."

USPS 190.030, Litigation Records—Labor Topic Files, 109.030

System name:

Change to read, "Litigation Records—Labor Law Topic Files 190.030

USPS 200.010, Non-Mail Monetary Claim—Relocation Assistance Claims, 200.010

System name:

Change to read, "Non-Mail Monetary Claims—Relocation Assistance Claims, 200.010.

W. Allen Sanders,

Associate General Counsel, General Law and Administration.

Annual Notice of Systems of Records

The following points are relevant to the annual notice of Postal Service system of records provided in this document.

a. Most system containing contract records, as well as other legal records relating to those contracts, are considered business records by the Postal Service, rather than systems of personal records, as that term is defined in the Privacy Act. Accordingly, these systems are not listed.

b. All Postal Service records described in this list are subject to:

1. The subpoena of a court of competent jurisdiction.
2. Review by Congress or one of its committees or subcommittees upon request.
3. The "routine use" portion of each system notice contains, as the first item, the system "purpose." The "purpose" is included to provide clarity and promote understanding of the system by the layman. It may be defined as that activity performed by those officers and employees of the Postal Service who have a need for component records of the system in the performance of their duties. Disclosure accounting is not maintained by the Postal Service for any activity listed as a "purpose."

A complete description of the following systems of records was published in the Federal Register of January 7, 1980 (45 FR 1558). These systems have not been revised since that publication:

USPS 030.010, Equal Employment Opportunity—EEO Discrimination Complaint Investigations

USPS 030.030, Equal Employment Opportunity—EEO Administrative Litigation Case Files

USPS 040.020, Customer Program—
Sexually Oriented Advertisements
USPS 050.005, Finance Records—
Accounts Receivable File Maintenance
USPS 050.040, Finance Records—
Uniform Allowance Program
USPS 070.010, Inquiries and
Complaints—Correspondence Files of
the Postmaster General
USPS 080.010, Inspection
Requirements—Investigative File
System
USPS 080.030, Inspection
Requirements—Vehicular Violations
Record System
USPS 100.050, Office Administration—
Localized Employee Administration
Records
USPS 110.020, Property
Management—Possible Infringement of
USPS Intellectual Property Rights
USPS 120.020, Personnel Records—
Blood Donor Record System
USPS 120.036, Personnel Records—
Discipline, Grievance and Appeals
Records for Non-Bargaining Unit
Employees
USPS 120.050, Personnel Records—
Employee Suggestion Control
USPS 120.060, Personnel Records—
Employment and Financial Interest
Records
USPS 120.070, Personnel Records—
General Personnel Folders (Official
Personnel Folders and Records related
thereto)
USPS 120.090, Personnel Records—
Medical Records
USPS 120.100, Personnel Records—
Performance Awards System Records
USPS 120.170, Personnel Records—
Safe Driver Award Records
USPS 120.220, Personnel Records—
Arbitration Case Files
USPS 130.020, Philately—Educators
Stamp Fun Mailing Lists
USPS 150.025, Records and
Information Management Records—
Privacy Act Appeals System
USPS 170.010, Statistical (Cost)
Systems—Workload Reporting Records
USPS 190.010, Litigation Records—
Civil Action Case Files
USPS 190.020, Litigation Records—
National Labor Relations Board
Administrative Litigation Case Files
USPS 200.030, Non-Mail Monetary
Claims—Tort Claims Records.
USPS 210.010, Contractor Records—
Architect Engineers Selection Records.
USPS 210.030, Contractor Records—
Contractor Employee Fingerprint
Records.

The following are complete descriptions of those systems that have changed since the January 7, 1980 Federal Register publication and of those systems which last appeared in the September 8, 1978 Federal Register:

USPS 010.010**SYSTEM NAME:**

Collection and Delivery Records—
Address Change and Mail Forwarding
Records, 010.010

SYSTEM LOCATION:

Post Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Postal customers requesting mail forwarding services from their local postal facilities.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records contain customer name, old address, new mailing address, mail forwarding instructions, effective date, information as to whether the move is permanent or temporary and the customer's signature.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 403, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide mail forwarding and address correction services to postal customers who have changed address. Use—

1. Records about any named individual are made available to any member of public upon request.
2. Disclosure may be made to a congressional office from the record or an individual in response to an inquiry from the congressional office made at the request of that individual.
3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.
4. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

This source document is stored in filing cabinets at the delivery unit. They are filed alphabetically by name within month or quarter. Records generated from the source document are stored on cards or list forms or recorded on magnetic tape where central markup is computerized. These records are filed alphabetically by name and route number or zone.

RETRIEVABILITY:

This system of records is indexed by name and address. Information may be retrieved by route number or ZIP Code where a computerized system is in use.

SAFEGUARDS:

Access to and use of these records are limited to those persons whose official duties require such access.

RETENTION AND DISPOSAL:

- a. Source document retained for 1 year from effective date and then destroyed by shredding or burning.
- b. Information on magnetic tape is retained for 1 year from effective date. At the end of that period, the tapes are erased.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Service Department, headquarters.

NOTIFICATION PROCEDURE:

Customers wishing to know whether information about them is maintained in this system of records should address inquiries to their local postmaster. Inquiries should contain full name and address, effective date of change order, route number (if known) and ZIP Code.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

The individual to whom the record pertains.

USPS 010.020**SYSTEM NAME:**

Collection and Delivery Records—
Boxholder Records, 010.020.

SYSTEM LOCATION:

Post Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Postal customers who have applied for or expressed an interest in lockbox or caller services, whether for private or public use.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records are in printed or card form and contain name, addresses, telephone number, record of payment, lockbox service preference and the names of persons or agents whether family members, business associates, or employees.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 403, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide post office box services to postal patrons.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. Disclosed to a Federal, State or local government agency upon prior written certification that the information is required for the performance of its official business.

3. Disclosed to persons authorized by law to serve judicial process when necessary to serve process.

4. Disclosed to public when box is being used for purpose of doing or soliciting business with the public.

5. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

6. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

7. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

8. May be disclosed to a Federal or State agency providing parent locator services or to other authorized persons as defined by Public Law 93-647.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Information is stored on printed or card form filed in metal cabinets. In locations where the records have been automated, information may be found on magnetic tape, magnetic cards or mylar strips.

RETRIEVABILITY:

Information is filed according to local needs, and the volume of records. Billing forms are filed numerically by box number within month in which rent is due. Applications are filed

alphabetically by name of individual or firm.

SAFEGUARDS:

Access limited to employees working in the boxholder section.

RETENTION AND DISPOSAL:

a. Billing forms are destroyed by shredding 2 years after closeout of the last entry.

b. Boxholder applications are retained for 2 years after termination of the rental.

c. Lockbox preference questionnaire forms are retained for six months after termination of survey.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Services Department,
APMG, Finance Department,
Headquarters.

APMG, Rates & Classification
Department, headquarters.

NOTIFICATION PROCEDURE:

Inquiries should be addressed to the local postmaster, requestors in person should identify themselves with drivers license, military, government or other form of identification.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "Notification" above.

RECORD SOURCE CATEGORIES:

The individual to whom the record pertains.

USPS 010.030

SYSTEM NAME:

Collection and Delivery Records—
Carrier Drive-Out Agreements, 010.030.

SYSTEM LOCATION:

District Offices, Sectional Centers,
Post Offices, Postal Data Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Letter carriers who use privately owned vehicles to transport the mails pursuant to a valid agreement with the local postmaster.

CATEGORIES OF RECORDS IN THE SYSTEM:

Information in these records contain Route Number, name and address of carrier, social security number and effective dates of the agreement.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 1206.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide reimbursement to carriers driving their own vehicles.

Use—

1. Provide necessary tax information to Internal Revenue Service.

2. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

3. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

7. Information contained in this system of records may be disclosed to an authorized investigator appointed by the United States Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Information is contained on preprinted forms, magnetic tape and computer printout reports.

RETRIEVABILITY:

The system is indexed by employees' social security number, pay location number and pay period.

SAFEGUARDS:

Normal precautions of filing equipment and limited access and the physical security measures of the computer facility.

RETENTION AND DISPOSAL:

Magnetic tape records are retained for two calendar years (January-December) and then deleted. Source forms are retained until a new or changed agreement and then destroyed by shredding or burning after 1 year.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Services Department, Headquarters.

NOTIFICATION PROCEDURE:

A carrier wishing to know if there is information in this system of records concerning him should notify the post office worked of the pay periods the agreement was in force, the route worked, give his name and social security number.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

The individual to whom the record pertains.

USPS 010.040

SYSTEM NAME:

Collection and Delivery Records—City Carrier Route Records, 010.040.

SYSTEM LOCATION:

Postal Service Headquarters, Regional Headquarters, District Offices, Sectional Centers, Post Offices, Automatic Data Processing Centers, Postal Data Centers and ADP Contractor sites.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Letter carriers, substitute carriers and flexible employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Employee name, social security account number, age, route number, length of service, leave time and whether or not a transportation agreement exists. It also includes information pertaining to work load, work schedule, performance analysis and individual's work habits. Inspection reports of employees, work load and work load adjustments. Employee and Examiner's comments on route adjustments and inspections. Statistical

engineering record of carrier and route characteristics.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 403, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To assist management in evaluating mail delivery and collection operations and administering these functions efficiently.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State or local charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

5. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

6. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Civil Service Commission, upon request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issued involved in the complaint.

7. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Information is contained on printed forms, computerized media, computer printouts.

RETRIEVABILITY:

The system is indexed by route number, employee name, or postal facility name.

SAFEGUARDS:

Access to and use of these records are limited to those persons whose official duties require such access.

RETENTION AND DISPOSAL:

Route inspection records are retained for 2 years where inspections are made annually or more frequently, and for 5 years where inspections are made less than annually. Disposal of records is by shredding or burning.

b. Other records in system are retained for a period of up to 1 year depending upon the criticality of the information and then destroyed by shredding or burning.

c. Statistical engineering records are retained for 5 years and then further retained on a year-by-year basis as specifically justified.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Services Department, Headquarters; SAPMG Operations Group, Headquarters (Statistical Engineering Records).

NOTIFICATION PROCEDURE:

Inquiries should contain employees name and social security number, specify the type of information being requested, and forwarded to post office where employed.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE above.

RECORD SOURCE CATEGORIES:

From employees, carrier supervisors, and route inspectors.

USPS 010.050

SYSTEM NAME:

Collection and Delivery Records—Delivery of Mail Through Agents, 010.050.

SYSTEM LOCATION:

Sectional Centers, Post Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Postal customer requesting delivery of mail through an agent and the agent to whom the mail is to be delivered.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records contain the name and address of customer, name and address of agent and the signatures of both parties.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 403, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—It serves as the written authority for the delivery of mail other than as addressed.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Records are maintained in file cabinets on pre-printed forms.

RETRIEVABILITY:

Forms are filed by customer name.

SAFEGUARDS:

Access is limited to postal employees in the delivery section.

RETENTION AND DISPOSAL:

Records are maintained until contract is terminated then destroyed by shredding.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Services Department.

NOTIFICATION PROCEDURE:

Submit to local postmaster proof of personal identity and name.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Co-signers of the request for delivery of mail through an agent.

USPS 010.070**SYSTEM NAME:**

Collection and Delivery Records—Mailbox Irregularities, 010.070.

SYSTEM LOCATION:

District Offices, Sectional Centers, Post Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Postal Service customers whose mailbox does not comply with USPS standards and regulations.

CATEGORIES OF RECORDS IN THE SYSTEM:

Information consists of the reports of irregularities as submitted by the carrier or route inspector, the name and address of customer and the date and signature of the postmaster.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 403, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide for the efficient delivery of the mail.

Use—

1. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Information is recorded on pre-printed forms.

RETRIEVABILITY:

Information is organized around route number.

SAFEGUARDS:

File in cabinets and access is limited to those USPS personnel having a working requirement.

RETENTION AND DISPOSAL:

Retained for one year after completed action and destroyed by shredding or burning.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Services Department, Headquarters.

NOTIFICATION PROCEDURE:

Information may be obtained from the local postmaster, by presenting identification as to name and address and zip code.

RECORD ACCESS PROCEDURES:

Make request of the local postmaster.

CONTESTING RECORD PROCEDURES:

Make request of the local postmaster.

RECORD SOURCE CATEGORIES:

Carrier or route inspector.

USPS 010.080**SYSTEM NAME:**

Collection and Delivery Records—Rural Carrier Routes, 010.080.

SYSTEM LOCATION:

Post Offices having rural carriers operations; Delivery Services Department, Sectional Centers; Regions; Districts; Postal Data Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Postal customers receiving rural mail delivery services, and rural carriers, substitute carriers and flexible employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records contained in this system are: Employee workload, work schedule and performance analysis. Inspection reports of employees, workload and workload adjustments, route travel description, employee and examiners' comments on adjustments and inspection. Employee name, route number, age, length of service, physical condition, quality of service and vehicle adequacy. Customer addresses and names of persons at

address location (some rural routes only).

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 403, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To assist management in evaluating rural mail delivery and collection operations and administering these functions efficiently and provide basis for payment of salary and vehicle maintenance allowance carriers.

Use—

1. Provide Bureau of the Census, Department of Commerce address information as requested to assist them in their statutory requirement of census taking.

2. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

3. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

7. Information contained in this system of records may be disclosed to an authorized investigator appointed by the United States Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713 and the contents of the requested record are needed by the investigator in the

performance of his duty to investigate a discrimination issue involved in the complaint.

8. Inactive records may be transferred to a GSA Federal Records Center for storage prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Preprinted forms or lists in ordinary file equipment or on computer tape and printouts.

RETRIEVABILITY:

Records are maintained by name and address of customer, and by route number, employee name or postal facility name.

SAFEGUARDS:

Access to and use of these records are limited to those persons whose official duties require such access.

RETENTION AND DISPOSAL:

a. Records in card or list form are maintained as long as the customer resides on the route; they are destroyed by shredding one year after the customer moves. b. Route travel description records, and establishment and discontinuance orders are retained until route is discontinued and then transferred to the Federal Records Center within two years after discontinuance date. c. Trip reports are retained for three years and then disposed of by shredding or burning. d. Route inspection reports and mail count records (mail counts made annually or more frequently) are retained for two years. Where mail counts are made less than annually records are retained until the next mail counts. Disposal of records is by shredding or burning. e. Other carrier records in system are retained for a period of up to one year depending upon the criticality of the information and then destroyed by shredding or burning.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Services Department, Headquarters.

NOTIFICATION PROCEDURE:

Customers wishing to know whether information about them is maintained in this system of records should address inquiries to their local postmaster. Inquiries should contain full name and address. Employee inquiries should state employee name and social security number, route number, specify the type of information being requested, and forward to post office where employed.

RECORD ACCESS PROCEDURES.

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

The customer to whom the record pertains and from employees, carrier supervisors and route inspectors.

USPS 020.010

SYSTEM NAME:

Communications (Public Relations)—Biographical Summaries of Management Personnel for Press Release, 020.010

SYSTEM LOCATION:

Office of Public and Media Relations, Headquarters.

Office of Communications and Public Affairs, Regional Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS executives, directors and managers to include regional staff officers, division directors, district managers, sectional center managers and other key management officials who may have frequent contact with news media or public speaking engagements.

CATEGORIES OF RECORDS IN THE SYSTEM:

Biographical summaries on sheets of paper plus photographs. Summaries include information as to present title and responsibility, length of service, age, place of birth, marital status and participation in local community activities.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401, 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose and Routine.

Use—

1. To provide the public with background information on postal management personnel in connection with public relations matters such as speaking engagements, media appearances, appearances before civic, fraternal and employee organizations.

2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Information is maintained on regular bond paper in file cabinets.

RETRIEVABILITY:

Information is filed by name and title.

SAFEGUARDS:

File cabinets are located in communications offices where information is available only to individuals having a need for access.

RETENTION AND DISPOSAL:

a. Biographical sketches maintained at regions are retained while the individual is assigned within the region. If individual is promoted to or assigned to a position within the USPS outside the Region, biographical information is forwarded to the appropriate Public Affairs office; if employment with the USPS is terminated, the sketch is destroyed by shredding.

b. Biographical sketches maintained at USPS, Washington, D.C., are retained indefinitely.

SYSTEM MANAGER(S) AND ADDRESS.

APMG, Employee and Public Communications, Headquarters.

NOTIFICATION PROCEDURE:

Inquiries should contain name and position held and presented to the Manager of Communications and Public Affairs where currently, or previously, employed.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

The individual to whom the record pertains.

USPS 030.020.

SYSTEM NAME:

Equal Employment Opportunity—Equal Employment Opportunity Staff Selection Records, 030.020

SYSTEM LOCATION:

Employee Relations Department, Headquarters, Regional Headquarters, Federal Records Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Candidates considered by Promotion Boards for EEO staff position.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name of candidate, level, address, service computation date, date of birth,

Social Security Number, postal background, personal information required to assess employee qualifications for position, estimate of potential and record of members of Board.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

30 U.S.C. 1001, Executive Orders 11478 and 11590.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide headquarters with information needed to complete selection process.

Use—

1. USPS Promotion Board reviews these records to determine applicant's eligibility for appointment.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any state of the legislative coordination and clearance process as set forth in that Circular.

3. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

7. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Forms, paper files.

RETRIEVABILITY:

Name of applicant and pay location.

SAFEGUARDS:

Maintained in locked file cabinets within secured facility.

RETENTION AND DISPOSAL:

Records are transferred to the Federal Records Center and maintained indefinitely.

SYSTEM MANAGER(S) AND ADDRESS.

APMG, Employee Relations Department, Headquarters

NOTIFICATION PROCEDURE:

Inquiries should be addressed to the head of the facilities where application was made. Inquiries should contain full name, position applied for, the date the Promotion Board met and Social Security Number.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Employee, and employee personnel data.

USPS 040.010.

SYSTEM NAME:

Customer Programs—Memo to Mailers Address File, 040.010

SYSTEM LOCATION:

USPS Headquarters, Customer Services Department and at a contractor site.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Subscribers to Memo to Mailers monthly newsletter.

CATEGORIES OF RECORDS IN THE SYSTEM:

Subscribers' mailing addresses and status of membership in Postal Customers Councils.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 403, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To prepare mailing labels for the monthly mailing of Memo to Mailers.

Use—

Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

Disclosure may be made from the record of an individual, where pertinent,

in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Magnetic tape and computer printout.

RETRIEVABILITY:

Records are maintained by subscriber's name, city, state and ZIP Code.

SAFEGUARDS:

The list contractor is forbidden by contract to use the list for any other means than to produce mailing labels for the U.S. Postal Service.

RETENTION AND DISPOSAL:

The master file is maintained indefinitely, and is updated each month.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Customer Services Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the SYSTEM MANAGER and supply their name and address.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION PROCEDURE" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION PROCEDURE" above.

RECORD SOURCE CATEGORIES:

Subscribers, Postmaster, USPS Customer Service Representatives.

USPS 050.010.

SYSTEM NAME:

Finance Records—Employee Travel Records (Accounts Payable), 050.010

SYSTEM LOCATION:

Postal Data Centers, Postal Service Personnel Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS Employees on official travel.

CATEGORIES OF RECORDS IN THE SYSTEM:

Travel vouchers and travel advances containing employee name, social security number, Finance Number, basic travel information, and relocation data.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 1001, 2008.

ROUTINE USERS OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—Reimburse Employees for official travel.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation or order issued pursuant thereto.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

3. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Equal Employment Opportunity Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 29 CFR 1613, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

7. Records in this system are subject to review by an independent Certified Public Accountant during an official audit of Postal Service finances.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Information is stored on pre-printed forms and magnetic tape.

RETRIEVABILITY:

Information is indexed by social security number.

SAFEGUARDS:

Access is subject to computer center access control.

RETENTION AND DISPOSAL:

Retained four years after payment and destroyed by burning or magnetic tape by scratching and reuse.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Finance Department, Headquarters.

NOTIFICATION PROCEDURE:

Requests for information should be presented to Employee's Personnel Officer, furnishing name and social security number.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

Information is received from the employee filing a voucher.

USPS 050.020

SYSTEM NAME:

Finance Records—Payroll System, 050.020

SYSTEM LOCATION:

Payroll system records are located and maintained in all Departments, facilities and certain contractor sites of the Postal Service. However, Postal Data Centers are the main locations for payroll information. Also, certain information from these records may be stored at emergency records centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS employees and postmaster relief/replacement employees

CATEGORIES OF RECORDS IN THE SYSTEM:

Records contain general payroll information including retirement deduction, family compensations, benefit deductions, accounts receivable, union dues, leave data, tax withholding, allowances, FICA taxes, salary, name, social security number, payments to financial organizations, dates of appointment or status changes, designation codes, position titles, occupation code, addresses, records of attendance, and other relevant payroll information. Also includes automated Form 50 records.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401, 1003, 5 USC 8339

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—

1. Information within the system is for handling all necessary payroll functions and for use by employee supervisors for the performance of their managerial duties.

2. To provide information to USPS Management and executive personnel for use in selection decisions and evaluation of training effectiveness. These records are examined by the Selection committee and Regional Postmasters General.

3. To compile various lists and mailing lists, i.e., Postal Leader, Women's Programs, Newsletter, etc.

4. To support USPS Personnel Programs such as Executive Leadership, Non-Bargaining Positions Evaluations of Probationary Employees, Merit Evaluations, Membership and Identification Listings, Emergency Locator Listings, Mailing Lists, Women's Programs, and to generate retirement eligibility information and analysis of employees in various salary ranges.

Use—

1. Retirement Deduction—To transmit to the Office of Personnel Management a roster of all USPS employees under Title 5 USC, Section 8334, along with a check.

2. Tax Information—To disclose to Federal, State and local government agencies having taxing authority, pertinent records, relating to individual employees, including name, home address, social security number, wages and taxes withheld for other jurisdiction.

3. Unemployment Compensation Data—To reply to State Unemployment Offices at the request of separated USPS employees.

4. Employee Address File—For W-2 tax mailings and Postal mailing such as Postal Life, Postal Leaders, etc.

5. Salary payments and allotments to financial organizations—To provide pertinent information to organizations receiving salary payments or allotments as elected by the employee.

6. FI (SS Tax) Deduction—To SS Administration as record of earnings under the SS act for all casual employees not under retirement.

7. Determine eligibility for coverage and payment of benefits under the Civil Service Retirement System, the Federal Employees' Group Life Insurance Program and the Federal Employees Health Benefits Program and transfer related records as appropriate.

8. Determine the amount of benefit due under the Civil Service Retirement

System, the Federal Employees' Group Life Insurance Program and the Federal Employees Health Benefits Program and authorizing payment of that amount and transfer related records as appropriate.

9. Transfer to Office of Workers' Compensation Program. Veterans Administration Pension Benefits Program, Social Security Old Age, Survivor and Disability Insurance and Medicare Programs, military retired pay programs, and Federal Civilian employee retirement systems other than the Civil Service Retirement System, when requested by that program or system or by the individual covered by this system of records, for use in determining an individual's claim for benefits under such system.

10. Transfer earnings information under the Civil Service Retirement System to the Internal Revenue Service as requested by the Internal Revenue Code of 1954, as amended.

11. Transfer information necessary to support a claim for life insurance benefits under the Federal Employees' Group Life Insurance, 4 East 24th Street, New York, NY 10010.

12. Transfer information necessary to support a claim for health insurance benefits under the Federal Employees' Health Benefits Program to a health insurance carrier or plan participating in the program.

13. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature to the appropriate agency whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation or order issued pursuant thereto.

14. To request or provide information from or to a Federal, state, or local agency maintaining civil, criminal, or other relevant enforcement or other pertinent information, such as licenses, if necessary to obtain information relevant to an agency decision concerning the hiring or retention of an employee, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant, or other benefits.

15. As a data source for management information for production of summary descriptive statistics and analytical studies in support of the function for which the records are collected and maintained, or for related personnel management functions or manpower studies; may also be utilized to respond to general requests for statistical information (without personal

identification of individuals) under the Freedom of Information Act or to locate specific individuals for personnel research or other personnel management functions.

16. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

17. Certain information pertaining to Postal Supervisors may be transferred to the National Association of Postal Supervisors.

18. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

19. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

20. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

21. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

22. To provide data for the automated Central Personnel Data File (CPDF) maintained by the Office of Personnel Management.

23. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Equal Employment Opportunity Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 29 CFR 1613, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

24. Records in this system are subject to review by an independent certified public accountant during an official audit of Postal Service finances.

25. May be disclosed to a Federal or State agency providing parent locator services or to other authorized persons as defined by Public Law 93-647. (Proposed 10/79)

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Preprinted forms, magnetic tape, microforms, punched cards, computer reports and card forms.

RETRIEVABILITY.

These records are organized by location, name and social security number.

SAFEGUARDS:

Records are contained in locked filing cabinets; are also protected by computer passwords and tape library physical security.

RETENTION AND DISPOSAL:

Records are retained and updated throughout employment with the Postal Service. Upon separation records become historical data, this data is retained at the local site for two years then forwarded to the Federal Records Center nearest the pay location.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Payroll Systems Department, Headquarters, APMG, Employee Relations Department.

NOTIFICATION PROCEDURE:

Request for information on this system of records should be made to the head of the facility where employed, giving full name and social security number. Headquarters employees should submit requests to the System Manager.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

Information is furnished by employees, supervisors and the Postal Source Data System.

USPS 060.010

SYSTEM NAME:

Fraud and False Representation Records—Consumer Protection Case Records, 060.010

SYSTEM LOCATION:

Consumer Protection Office, Law Department, USPS Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Respondents in proceedings initiated pursuant to 39 U.S.C. subsection 3005; names of attorneys representing parties; assigned Postal Inspectors; and promoter of scheme.

CATEGORIES OF RECORDS IN THE SYSTEM:

Describes and provides history of the above and identifies interested parties.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM.

39 USC subsection 3005.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—Ready reference source for determining status of pending case and identification of postal employees most familiar therewith.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

3. Disclosure may be made to a congressional office from the record or an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

5. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Information in this system is maintained on printed forms.

RETRIEVABILITY:

Records are maintained by an alphabetic indexing by name of respondent.

SAFEGUARDS:

Records are maintained in closed filing cabinets under general scrutiny by personnel of the Law Department.

RETENTION AND DISPOSAL:

Records in this system are maintained indefinitely.

SYSTEM MANAGER(S) AND ADDRESS:

Assistant General Counsel, Consumer Protection Office, Law Department, USPS Headquarters.

NOTIFICATION PROCEDURE:

Customers wishing to know whether information about them is maintained in this system of records should address inquiries to the above SYSTEM MANAGER. Inquiries should contain full name, name by which respondent in proceeding may have been designated; approximate time period in which proceedings may have been initiated.

RECORD ACCESS PROCEDURES:

See SYSTEM MANAGER above.

CONTESTING RECORD PROCEDURES:

See SYSTEM MANAGER above.

RECORD SOURCE CATEGORIES:

Complaints, correspondence between parties involved and Postal Inspection Service investigative reports.

USPS 060.020

SYSTEM NAME.

Fraud and False Representation Records—Prohibitory Order, 060.020

SYSTEM LOCATION.

Consumer Protection Office, Law Department, Headquarters, Postal Service Centers, Regional Headquarters, Sectional Management Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Persons requesting prohibitory orders, the mailers against whom such orders are issued.

CATEGORIES OF RECORDS IN THE SYSTEM:

Applications for prohibitory orders, the mailing upon which request is predicated, the issued order and the registered mail receipt signed by mailer against whom order was issued.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC subsection 3008.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To process request of an order to prohibit pandering advertisement and to determine whether violations of orders have occurred. Used by Consumer Protection Office and Regional Counsel to investigate violations of postal statutes.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the

appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

4. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Information is maintained in letter form, handwritten and typed.

RETRIEVABILITY:

Data may be found by prohibitory order number or by name of person requesting order.

SAFEGUARDS:

Records are maintained in closed filing cabinets.

RETENTION AND DISPOSAL:

Information is retained indefinitely.

SYSTEM MANAGER(S) AND ADDRESS:

Assistant General Counsel, Consumer Protection Office, Law Department, Headquarters.

NOTIFICATION PROCEDURE:

Name and address of person requesting prohibitory order should be furnished the SYSTEM MANAGER.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

Persons requesting prohibitory orders.

USPS 070.020

SYSTEM NAME:

Inquiries and Complaints—Government Officials' Inquiry System, 070.020.

SYSTEM LOCATION:

Government Relations Department, USPS Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Employees, former employees, applicants for employment, contractors, lessors, and customers who have written to nonpostal government officials, congressmen and other government officials corresponding with the USPS in behalf of postal customers/employees and various individuals to whom Postal Service announcements/greetings are directed.

CATEGORIES OF RECORDS IN THE SYSTEM:

Information stemming from correspondence described above, and lists of individuals for announcements/greetings.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide USPS officials with the means of responding to inquiries from and/or for other government officials and to serve as a work load reporting system for which a description appears as USPS 170.010.

Use—

1. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

In original, typed, printed, or handwritten form and on magnetic tape/disk and computer printouts.

RETRIEVABILITY:

Subject category as derived from correspondence and the name of the inquirer and/or official inquiring in his/her behalf.

SAFEGUARDS:

Records are maintained in closed file cabinets under general scrutiny of personnel of Government Relations

Department. Computer readable media are maintained in a secured data processing facility.

RETENTION AND DISPOSAL:

Paper records are maintained for four years and then destroyed by shredding; magnetic tape/disk records are kept for three years and then erased.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Government Relations Department, USPS Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the above System manager. Inquiries should contain full name, the name of the government official to whom he wrote, the nature of his inquiry and the approximate date.

RECORD ACCESS PROCEDURES:

See Notification Procedure above.

CONTESTING RECORD PROCEDURES:

See Notification Procedure above.

RECORD SOURCE CATEGORIES:

Nonpostal government officials.

USPS 070.040

SYSTEM NAME:

Inquiries and Complaints—Customer Complaint Records, 070.040.

SYSTEM LOCATION:

Consumer advocate, USPS, Regional and National Headquarters, District Officers, Post Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS customers who have initiated complaints against the USPS.

CATEGORIES OF RECORDS IN THE SYSTEM:

The complainant's name, address, and nature of the specific complaint, and resolution of same.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 403, 404

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To process USPS customer complaints regarding mail services.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged

with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Records are stored in original typed, printed, handwritten or computer printed form and on magnetic tape.

RETRIEVABILITY:

By chronological sequence within subject category as derived from correspondence and the name of inquirer or complainant.

SAFEGUARDS:

Paper records are maintained in closed filing cabinets. Computer records are subject to the security of the computer room.

RETENTION AND DISPOSAL:

Records are retained up to a maximum period of two calendar years. All correspondence is retained during the calendar year received, plus one additional year. Paper records are destroyed by burning or shredding. Computer records are destroyed by erasing.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Customer Services Department, Headquarters

NOTIFICATION PROCEDURE:

Customers wishing to know whether information about them is maintained in this system of records should address inquiries to the same facility to which they submitted their complaint.

RECORD ACCESS PROCEDURES:

See Notification above.

CONTESTING RECORD PROCEDURES:

See Notification above.

RECORD SOURCE CATEGORIES:

USPS customers.

USPS 080.020

SYSTEM NAME:

Inspection Requirements—Mail Cover Program, 090.020.

SYSTEM LOCATION:

USPS Inspection Service National and Regional Headquarters; Divisional Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals on whom a mail cover has been duly authorized to obtain information in the interest of (1) protecting the national security (2) locating a fugitive and (3) obtaining evidence of the commission or attempted commission of a crime which is punishable by imprisonment for a term exceeding one year.

CATEGORIES OF RECORDS IN THE SYSTEM:

Names and addresses of individuals, inter-office memorandums, and correspondence with other agencies.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401.404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To investigate the commission on or attempted commission of acts constituting a crime that is punishable by law.

Use—

1. Information from this system of records may be disclosed to an appropriate law enforcement agency, whether Federal, State or local, charged by law with the responsibility for investigating, prosecuting or otherwise acting with respect to protecting the national security, locating a fugitive, or obtaining evidence of commission or attempted commission of a crime.

2. A record relating to a case or matter may be disseminated in an appropriate Federal, State, local, or foreign court on grand jury proceeding in accordance with established constitutional, substantive, or procedural law or practice.

3. A record relating to a case or matter may be disseminated to an actual or potential party or his attorney for the purpose of negotiation or discussion on such matters as settlement of the case or matter, plea bargaining, or informal discovery proceedings.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent,

in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Original typed documents and/or duplicate copies.

RETRIEVABILITY:

Subject's name filed alphabetically by fiscal year.

SAFEGUARDS:

Mail cover data is stored in locked cabinets or in a safe. Classified mail cover material and any mail cover data which involves national security is stored in a safe or in metal file cabinets equipped with either steel lockbar hasp and staple, or locking device and an approved three or more combination dial-type padlock from which the manufacturer's identification numbers have been obliterated.

RETENTION AND DISPOSAL:

Files and records pertaining to mail covers are retained for eight years, and older data is destroyed by shredding or burning.

SYSTEM MANAGER(S) AND ADDRESS:

Chief Inspector, UPSPS Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the above SYSTEM MANAGER. Inquiries should contain full name and current address, together with previous addresses for past eight years when applicable.

RECORD ACCESS PROCEDURES:

See System Manager above.

CONTESTING RECORD PROCEDURES:

See System Manager above.

RECORD SOURCE CATEGORIES:

Correspondence from requesting authority and record of action taken upon that request.

SYSTEMS EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:

Reference 39 C.F.R. 266.9 for details.

USPS 090.020

SYSTEM NAME:

Non-Mail Services—Passport Application Records, 090.020.

SYSTEM LOCATION:

Eight-hundred (800) Post Offices in all states except New Jersey.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Persons applying for passports.

CATEGORIES OF RECORDS IN THE SYSTEM:

Passport applications, name, telephone number and services rendered.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 411, 22 U.S.C. 214.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To process the application of passports.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, local or foreign, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. Records may be transferred to the State Department.

3. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

4. Disclosure may be made to congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Information in this system is maintained on printed forms in hard copy.

RETRIEVABILITY:

By name of applicant and by postal accounting quarter.

SAFEGUARDS:

Information in this system of records is maintained in file cabinets in the Accounting Unit.

RETENTION AND DISPOSAL:

Passport applications are retained for two days at the post office where application was made and then forwarded to the Department of State. Applicant's names and telephone numbers are retained at the post office for three months following the close of the postal quarter in which application was made.

SYSTEM MANAGER(S) AND ADDRESS:

APMG Delivery Services Department.

NOTIFICATION PROCEDURE:

Customers wishing to know whether information about them is maintained in this system of records should address inquiries to the postmaster of the post office where a passport application was made. Inquiries should contain full name and date of application. (NOTE: The original case file is maintained by Department of State and must be requested from that organization as provided for under Department of State Privacy Act system for passport information.)

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Information in this system of records is obtained from the applicant.

USPS 090.030.

SYSTEM NAME:

Non-Mail Service—U.S. Savings Bonds Application Record. 090.030

SYSTEM LOCATION:

Selected Post Offices throughout the United States where the Postal Service is the issuing agent.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Persons applying for U.S. Savings Bonds to be issued in the names of natural persons in their own right only.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name and address, number of bonds applied for and total amount of purchase.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 411.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To process applications for U.S. Savings Bonds.

Use—

1. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

2. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

3. To refer, where there is an indication of a violation or potential violator of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, local or foreign charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

4. Records may be transferred to the Treasury Department.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Information in this system is maintained on printed forms in hard copy.

RETRIEVABILITY:

By name of applicant.

SAFEGUARDS:

Information in this system of records is maintained on secure premises in file cabinets.

RETENTION AND DISPOSAL:

Information in this system is maintained for two years and then destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

AMPG, Finance Department.

NOTIFICATION PROCEDURE:

Customers wishing to know whether information about them is maintained in this system of records should address inquiries to the postmaster in whose facility the application was filed, inquiries should contain full name and address of customer.

RECORD ACCESS PROCEDURES:

See Notification above.

CONTESTING RECORD PROCEDURES:

See Notification above.

RECORD SOURCE CATEGORIES:

Information in this system of record is obtained from the applicant.

SYSTEM NAME:

Office Administration—Carpool Coordination/Parking

Records System. 100.010

SYSTEM LOCATION:

Procurement and Supply Department, Headquarters and various field installations.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS employees, other building tenants, and other individuals who are members of carpools with USPS employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Applications, letters of violations, letters of suspensions, payment data.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—Provide parking and carpooling services to employees.

Use—

1. To provide each employee of Headquarters, USPS, who desires to join or establish a carpool with the listing of employees who live in his/her ZIP Code area.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

3. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Civil Service Commission, upon request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his

duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Preprinted forms and magnetic tape/disc.

RETRIEVABILITY:

Carpool member name and ZIP Code, space or license number.

SAFEGUARDS:

Folders containing paper documents are maintained in locked file cabinets to which only authorized personnel have access. Computer equipment is located in secured area, and magnetic tape/disc files are kept in locked steel cabinets.

RETENTION AND DISPOSAL:

All carpool and parking service records are retained for a period of six months following termination of service. At the end of retention period, paper records are destroyed by shredding and tape/disc records are erased.

SYSTEM MANAGER(S) AND ADDRESS:

AMPG, Procurement and Supply Department, Headquarters, Executive Manager, PST & DI Center.

NOTIFICATION PROCEDURE:

Employees wishing to know whether information about them is maintained in this system of records should address inquiries to the system manager where employed.

RECORD ACCESS PROCEDURES:

See Notification Procedure above.

CONTESTING RECORD PROCEDURES:

See Notification Procedure above.

RECORD SOURCE CATEGORIES:

From carpool and parking service applicants/users.

USPS 100.020**SYSTEM NAME:**

Office Administration—Customer Services Communicator Letter, 100.020.

SYSTEM LOCATION:

Customer Services Department, Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Headquarters and Regional Customer Services personnel, District Managers, District Directors of Customer Services, Sectional Center Directors of Customer Services, BMC General Managers and Customer Engineers, selected postmasters and requesters, Customer

Services representatives, Sectional Center Managers of Retail Sales and Services, Post Office Managers of Customer Services.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name and home/business address of employees receiving newsletter.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To distribute a sales and marketing newsletter to Postal Service Customer services employees.

1. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

2. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Addressograph plates, magnetic tape, computer printouts and paper forms.

RETRIEVABILITY:

Name of recipient of communicator letter.

SAFEGUARDS:

Addressograph plates and paper forms are kept in closed file cabinets accessible only by authorized customer services personnel. Magnetic tapes and computer printouts are maintained in a secured ADP facility.

RETENTION AND DISPOSAL:

Records are maintained on a year-to-year basis subject to reverification each year. At the end of retention period, paper records are shredded, computer records are erased, and addressograph plates are destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

Assistant Postmaster General, Customer Services Department, Headquarters.

NOTIFICATION PROCEDURE:

Employees wishing to know whether information about them is maintained in this system of records should address inquiries to the head of the facility where they are employed.

RECORD ACCESS PROCEDURES:

See Notification Procedure above.

CONTESTING RECORD PROCEDURES:

See Notification Procedure above.

RECORD SOURCE CATEGORIES:

Information in this system is obtained from payroll system and in-house listings of interested readers.

USPS 110.010

SYSTEM NAME:

Property Management Records—
Accountable Property Records, 110.010.

SYSTEM LOCATION:

All USPS Components.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Employees assigned accountable property.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records controlling the issuance of accountable Postal Service Property, such as equipment, credentials, and controlled documents.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide a record of accountable property on hand and to whom it has been assigned.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate law enforcement agency, whether Federal, state, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation or order issued pursuant thereto.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

5. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its requests when needed by that

organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

6. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Equal Employment Opportunity Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 29 CFR 1613 and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Information in this system is maintained on printed forms.

RETRIEVABILITY:

Name of recipient of accountable property and types of equipment.

SAFEGUARDS:

Physical security.

RETENTION AND DISPOSAL:

As long as individual is charged with equipment, records are returned to individual when he is no longer accountable.

SYSTEM MANAGER(S) AND ADDRESS:

(1) Chief Postal Inspector, Headquarter; (2) APMG, Procurement and Supply Department, Headquarters.

NOTIFICATION PROCEDURE:

Employees wishing to know whether information about them is maintained in the system should address inquiries to the Custodian in the facility where assignment was made. Headquarters employees should submit request to the SYSTEM MANAGER.

RECORD ACCESS PROCEDURES:

See Notification above.

CONTESTING RECORD PROCEDURES:

See Notification above.

RECORD SOURCE CATEGORIES:

Information is obtained by the individual to whom the record pertains.

USPS 120.035.

SYSTEM NAME:

Personnel Records—Employee
Accident Records, 120.035

SYSTEM LOCATION:

Safety offices in any USPS facility.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

All postal employees that have an accident that involves 100 dollars or more damage and/or an occupational injury or illness.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, age, sex and type of accident.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Public Laws 91-596 and 94-82,
Executive Orders 11807.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide data for analytical studies.

Use—

1. Information contained in this system of records may be disclosed to an authorized investigator appointed by the United States Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

2. To furnish the U.S. Department of Labor with serious accident reports, information to reconcile claims filed with the Office of Worker's Compensation and quarterly and annual summaries of occupational injuries and illnesses; and to make information available to the Secretary of Labor upon his request.

3. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation or order issued pursuant thereto.

4. To a court, party, or counsel for a party, to litigation involving accident or to which it is relevant or to persons insurance companies or counsel for the foregoing settlement or attempting to settle claims involving the accident.

5. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

6. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its requests when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

7. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

8. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

9. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Information in this system is maintained on index cards, magnetic tape, preprinted forms and computer print-outs.

RETRIEVABILITY:

Employee name and social security number.

SAFEGUARDS:

Maintained in closed file cabinets within secured facilities.

RETENTION AND DISPOSAL:

Records are maintained locally for two years. Copies are maintained at National Headquarters for five years following the end of the calendar year to which they relate as required by OSHA.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, Headquarters.

NOTIFICATION PROCEDURE:

Employees wishing to know whether information about them is maintained in this system of records should address inquiries to the head of the facility where employed. Headquarters employees should submit requests to the SYSTEM MANAGER. Inquiries should contain full name, address, finance number and social security number.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

USPS Accident Reports and OWCP claim forms.

USPS 120.040.

SYSTEM NAME:

Personnel Records—Employees Job Bidding Records, 120.040

SYSTEM LOCATION:

Most departments, facilities and certain contractor sites of the Postal Service.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Employees who have made a "Bid for Preferred Assignment" with the USPS.

CATEGORIES OF RECORDS IN THE SYSTEM.

Knowledge of schemes, vacant position characteristics, seniority of the employee, level of the candidate, and craft.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 1001, 1208.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide the Office of Personnel with fair and impartial information to match vacant position to the most qualified candidate.

Use—

1. To provide information for official bulletin boards and release to various employee organizations.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

3. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. Information contained in this system of records may be disclosed to an authorized investigator appointed by the United States Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against U.S.

Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Records are stored on magnetic tape, punched cards, preprinted forms and computer printed reports.

RETRIEVABILITY:

This system is indexed by employee name and Social Security Number.

SAFEGUARDS:

Computer center access control and limitation within offices to those employees maintaining the system.

RETENTION AND DISPOSAL:

Computer records are saved two years, then automatically deleted. Paper records are kept six months after a vacancy is filled, then destroyed. Some records are retained until employee separation.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, Headquarters.

NOTIFICATION PROCEDURE.

The employee should state the position of bid and identify himself with name, Social Security Number, closing date of the bid notice, and forward this information to the head of the facility where employed. Headquarters employees should submit requests to the System Manager.

RECORDS ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Employee personnel data, scheme knowledge, qualifications of the job and of the candidate, successful bidders notices from vacant duty assignment postings.

USPS 120.080

SYSTEM NAME:

Personnel Records—Master Minority File Records, 120.080.

SYSTEM LOCATION:

Employee Relations Department, Headquarters and Postal Data Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

All USPS employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Consists of the Minority Designation Code and social security number of USPS employees.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

42 U.S.C. 2000e-16, Executive Orders 11478 and 11590.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES.

Purpose—To provide the USPS Office of Equal Employment Opportunity with minority statistics as required.

1. Disclosure may be made to the Civil Service Commission for the oversight and enforcement of Federal EEO regulations.

2. Information contained in this system for records may be disclosed to an authorized investigator appointed by the Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Magnetic tapes.

RETRIEVABILITY:

Employee's social security number.

SAFEGUARDS:

Computer Password security, physical security, specialized access instructions.

RETENTION AND DISPOSAL:

Computer records are retained for two years.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department.

NOTIFICATION PROCEDURE:

Employees wishing to know whether a minority code is maintained for them, should address inquiries to the System Manager. Inquiries should contain full name and social security number.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

Information is obtained from the employees.

USPS 120.098**SYSTEM NAME:**

Personnel Records—Office of Workers' Compensation Program (OWCP), Record Copies 120.098.

SYSTEM LOCATION:

All postal facilities.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Postal employees who have voluntarily filed for injury compensation.

CATEGORIES OF RECORDS IN THE SYSTEM:

Copies of Department of Labor forms consisting of claims and supporting information, Postal Service forms and correspondence related to the claim; automated payment and accounting records.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 1005.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used to provide injury compensation to qualifying employees and to maintain a record of the events as a basis for managerial decisions.

Use—

1. To provide information to the Department of Labor for the purpose of determining whether a claimant qualifies for compensation and to what extent qualification applies.

2. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that circular.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

6. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the

appropriate agency, whether international, Federal, State or local charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, rule, regulation or order issued pursuant thereto.

(Temp.) Disclosure of information about plan members may be made to respective health benefit carriers for a one-time comparison with the carriers' claim/payment files. (Note: This routine use will be in effect for a period of one year from its effective date.)

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Printed forms and correspondence (Note: In some cases, the USPS by agreement with the Department of Labor (DOL), temporarily stores original case files. These files are considered to be DOL records to which DOL rather than USPS regulations apply.) Continuation of pay and DOL charge-back information is stored on computer media.

RETRIEVABILITY:

Records are retrieved alphabetically by name and social security number.

SAFEGUARDS:

Maintained in locked filing cabinets within the exclusive custody of the injury compensation control point. Automated records are protected through computer password security, encryptions, and/or a computer software security system.

RETENTION AND DISPOSAL:

OWCP case files are maintained for five years after employee has left the Postal Service, then destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, and APMG, Finance Department, Headquarters.

NOTIFICATION PROCEDURES:

Employees wishing to know whether information about them is maintained in this system of records should address inquiries to the head of the facility where employed. Headquarters employees should submit requests to the System manager.

RECORD ACCESS PROCEDURE:

See NOTIFICATION PROCEDURE above. (Note: The original case file (in most cases) is maintained by OWCP and must be requested from that organization as provided for under

Department of Labor Privacy Act
System DOL/EAS-13.)

CONTESTING RECORD PROCEDURES:

The contents of OWCP records may be contested only by contacting OWCP as provided for under the Department of Labor Privacy Act System DOL/EAS-13.

RECORD SOURCE CATEGORIES:

Information is obtained from the claimant, the supervisor, witnesses, physicians, and Department of Labor.

USPS 120.099

SYSTEM NAME:

Personnel Records—Injury
Compensation Payment Validation
Records, 120.099.

SYSTEM LOCATION:

All postal facilities having injury
compensation units, National
Headquarters and Postal Data Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Current and former Postal Service
employees who have received or are
receiving injury compensation program
payments.

CATEGORIES OF RECORDS IN THE SYSTEM:

Lists of individuals whose names
appear in two systems of records,
research case records, and remuneration
records related to injury compensation
paid to current and former employees by
the Postal Service. (See "Retention and
disposal" below for cases in which these
files are converted to investigative
files.)

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 1001, 39 U.S.C. 1005.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSE OF SUCH USES:

Purpose—This information is used to
identify instances in which improper
double payments have been or are being
made to Postal Service employees who
have filed injury/sickness compensation
claims and to maintain records of this
event as a basis for: detecting fraud;
seeking remuneration and/or legal
actions; reporting the extent of double
payments nationwide; and for proposing
corrective legislation.

Use:

1. (Temp.) Disclosure of information
about plan members may be made to
respective health benefit carriers for a
one-time comparison with the carriers'
claim/payment files. (Note: This routine
use will be in effect for a period of one
year from its effective date.)

2. Pursuant to the National Labor
Relations Act, records from this system
may be furnished to a labor organization
upon its request when needed by that
organization to perform properly its
duties as the collective bargaining
representative of postal employees in an
appropriate bargaining unit.

3. Disclosure may be made to a
congressional office from the record of
an individual in response to an inquiry
from the congressional office made at
the request of that individual.

4. May be disclosed to the Office of
Management and Budget in connection
with the review of private relief
legislation as set forth in OMB Circular
No. A-19 at any stage of the legislative
coordination and clearance process as
set forth in that circular.

5. Disclosure may be made from the
record of an individual, where pertinent,
in any legal proceeding to which the
Postal Service is a party before a court
or administration body.

6. To refer, where there is an
indication of a violation or potential
violation of law, whether civil, criminal
or regulatory in nature, to the
appropriate agency, whether
international, Federal, State or local,
charged with the responsibility of
investigating or prosecuting such
violation or charged with enforcing or
implementing the statute, rule,
regulation or order issued pursuant
thereto.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Computer reports, paper records,
correspondence and research records.
(Note: These files are considered to be
USPS records to which USPS regulations
apply.)

RETRIEVABILITY:

Records are retrieved by social
security number.

SAFEGUARDS:

These restricted files are maintained
in locked file cabinets. Access to
automated records is protected through
a computer security system, file
encryption, and/or password protection.

RETENTION AND DISPOSAL:

- a. Computer reports.
 - (1) Initial data collection reports and
master file/tape are maintained for 3
years and destroyed by
depersonalization.
 - (2) Subsequent reports containing
affirmative identifications become part
of research case records.

b. Research case records (copies of
records from other system—includes
computer reports, paper records, and
correspondence).

(1) If research determines
nonapplicability, destroy by burning or
shredding, 6 months after such
determination is made.

(2) If research determines
applicability, research records then
become (a) part of an investigative case
file and fall within system USPS 080.010,
Inspection Requirements Investigative
File System (refer to USPS 080.010 for
retention and disposal instructions), or
(b) a remuneration case file which is
maintained for 2 years and destroyed by
burning or shredding.

Extra copies of research records are
destroyed at the time a remuneration or
investigative case file is created.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations
Department, Headquarters.

NOTIFICATION PROCEDURE:

Employees or former employees
wishing to know whether information
about them is maintained in this system
or records should address inquiries to
the System manager.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE
above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

Information is obtained from Postal
Service injury compensation case files,
payment records and employment
records as found in USPS Privacy Act
Systems: USPS 050.020, 120.070, and
120.098; Social Security Administration
death files; and pertinent Federal health
benefit carriers' claim/payment files.

USPS 120.110

SYSTEM NAME:

Personnel Records—Preemploy
Investigation Records, 120.110

SYSTEM LOCATION:

Post Offices/Facilities; Regional and
National Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Postal Employees and applicants for
employment.

CATEGORIES OF RECORDS IN THE SYSTEM:

Replies from character references,
former employers and local police
records, drug history records and other
investigative reports used to determine
suitability for employment. Other

records filed with these are: Civil Service Commission records (privacy system—CSC/GOVT-4) compiled through a National Agency Check and Inquiry (NACI) and forwarded to the USPS for assistance in making a hiring decision.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 410(b), 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To determine suitability for employment.

Use—

1. To any agency from which information is requested in the course of an investigation, to the extent necessary to identify the individual, inform the source of the nature and purpose of the investigation, and to identify the type of information requested.

2. In the event of an indication of any violation or potential violation of the law, whether civil, criminal, or regulatory in nature, and whether arising by statute, or by regulation, rule or order issued pursuant thereto the relevant records in the system of records may be referred, as a routine use, to the appropriate agency, whether Federal, State, local or foreign, charged with the responsibility of investigating or prosecuting such violation or charge with enforcing or implementing the statute, or rule, regulation or order issued pursuant thereto; such referral shall also include, and be deemed to authorize (1) any and all appropriate and necessary uses of such records in a court of law and before an administrative board or hearing, including referrals related to probation and parole matters, and (2) such other interagency referrals as may be necessary to carry out the receiving agency's assigned law enforcement duties.

3. To a Federal agency, in response to its request, in connection with the letting of a contract, or the issuance of a license grant, or other benefit by the requesting agency, to the extent that the information is relevant and necessary to the requesting agency's decision on matters.

4. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

5. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry

from the congressional office made at the request of that individual.

6. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

7. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

8. Information contained in this system of records may be disclosed to an authorized investigator appointed by the United States Civil Service Commission upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEWING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Information is maintained on preprinted forms and correspondence.

RETRIEVABILITY:

Information is indexed alphabetically by name.

SAFEGUARDS:

Information is stored in locked file cabinets accessible to those with an appropriate security clearance.

RETENTION AND DISPOSAL:

a. If an applicant is found unsuitable for employment, or if an employee is found unsuitable after he has begun work, all local investigative records which support the decision of unsuitability will be retained for a period of two years from the date action was taken to deny or terminate employment. b. If an employee is initially found suitable for employment as result of a local investigation, and is ultimately retained upon receipt of the NACI report from the Civil Service Commission, the local investigative reports will be retained for a period of two years from the date the employee is initially found suitable for employment. c. CSC NACI reports are retained in the same fashion as local investigative records.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, Headquarters.

NOTIFICATION PROCEDURES:

Apply to the head of the postal facility where employed giving name. Headquarters employees should submit requests to the System Manager.

RECORD ACCESS PROCEDURES:

a. Local Investigative records—Apply to the head of the postal facility where employed. Headquarters employees should submit requests to the System manager. b. CSC NACI reports—Apply to the Civil Service Commission as instructed by privacy system CSC/GOVT-4.

CONTESTING RECORD PROCEDURES:

See Record access procedures above.

RECORD SOURCE CATEGORIES:

Information is obtained primarily from local police records, former employers, and character reference.

SYSTEMS EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:

Reference 39 CFR 266.9 for details.

USPS 120.120

SYSTEM NAME:

Personnel Records—Personnel Research and Test Validation Records, 120.120.

SYSTEM LOCATION:

USPS National Tests Administration Center, Los Angeles, CA; USPS National and Regional Headquarters; Bulk Mail Centers; District Offices; and the Oklahoma City Computer Center.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Applicants for postal employment and USPS employee applicant for reassignment and/or promotion.

CATEGORIES OF RECORDS IN THE SYSTEM:

Computer scannable information and the applicants' answers to the test questions. Reports and analyses that have resulted from comparison of information from this system and from system USPS 120.121.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide verification of the applicants' test score. Data are collected whenever an examination is given and are used for construction, analysis, and validation of written tests;

for research on personnel measurement and selection methods and techniques and research on personnel management practices such as performance evaluation or productivity. Race and national origin data are used to evaluate any adverse impact of the selection process. Use of these race and national origin data is limited to research projects and test validation conducted by the Postal Service. No personnel decisions are made in the use of these research records. Many data are collected under conditions assuring their confidentiality. This confidentiality will be protected. Personnel information in this system of records is used by the personnel research staff in the Office of Personnel Management of the U.S. Postal Service.

Use—

1. To disclose information to the Equal Employment Opportunity Commission for use in determining the existence of adverse impact in the total selection process, in reviewing allegations of discrimination, or in assessing the status of compliance with Federal law.

2. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, or order issued pursuant thereto.

3. To request information from a Federal, State or local agency maintaining civil, criminal, or other relevant enforcement or other pertinent information, such as licenses, if necessary to obtain relevant information to an agency decision concerning the hiring or retention of an employee, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant or other benefit.

4. To provide information or disclose to a Federal agency, in response to its request, in connection with the hiring or retention of an employee, the letting of a contract, or issuance of a license, grant, or other benefit by the requesting agency to the extent that the information is relevant and necessary to the requesting agency's decision on that matter.

5. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

6. Pursuant to the National Labor Relations Act, records from this system

may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

7. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

8. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Answer sheets in handwritten form and computer storage media.

RETRIEVABILITY:

This system of records is indexed by employee name, batch number or employee's date of examination and examination center administering the examination.

SAFEGUARDS:

These records are maintained in closed file cabinets in a secure facility.

RETENTION AND DISPOSAL:

Records are maintained for five years. Paper records are destroyed by shredding and computer records by erasing.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether this system of records contains information on them should address inquiries to the head of the Test Administration Center where they were examined. Inquiries should contain full name, social security number, date of examination, examination number, and place of participation in the examination.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Applicants' test answers.

SYSTEMS EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:

Reference 39. CFR 286.9 for details.

USPS 120.121

SYSTEM NAME:

Personnel Records—Applicant Race, Sex, National Origin and Disability Status Records, 120.121.

SYSTEM LOCATION:

USPS National Test Administration Center, Los Angeles, CA.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Applicants for USPS entry-level examinations, including USPS employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Individual's name, Social Security Number, date of birth, lead office installation number, race, sex, national origin and disability status data.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 101 and 5 U.S.C. 7201.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide the Postal Service with the ability to assess the impact of personnel selection decisions on applicants in each racial, sex, national origin and disability category. Note: These data are maintained only on those applicants who voluntarily provide it and under conditions assuring that the individual's self-identification as to race, sex, national origin, and disability status does not accompany that individual's application when it is under consideration by a selecting official. Data are collected via a research questionnaire on an applicant-by-applicant basis and used to produce summary descriptive statistics and analytical studies to evaluate personnel/organizational measurement and selection methods; implement and evaluate USPS affirmative action programs; determine any adverse impact in the overall personnel selection process; identify categories of individuals for personnel research; and for related work force studies.

Use—

1. To disclose information to the Equal Employment Opportunity Commission for use in determining the existence of adverse impact in the total selection process, in reviewing allegations of discrimination, or in assessing the status of compliance with Federal law.

2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Disclosure may be made from the record of an individual, where pertinent

in any legal proceeding to which the Postal Service is a party before a court or administrative body.

4. Disclosure may be made in response to the order of a court of competent jurisdiction.

5. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, or order issued pursuant thereto.

6. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular A-19 at any stage of the legislative and clearance process as set forth in that Circular.

7. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Paper files, magnetic tape and disks.

RETRIEVABILITY:

Records are retrieved by name and Social Security Number.

SAFEGUARDS:

Records are maintained in lockable filing cabinets in a secured room. Access is further restricted by computer passwords.

RETENTION AND DISPOSAL:

Records are retained for five years. Manual records are shredded or burned and magnetic tapes or disks are erased. Statistical records (without individual identifiers) are maintained for as long as needed for the purpose of conducting longitudinal studies.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, Headquarters.

NOTIFICATION PROCEDURE:

Individuals wishing to know whether this system of records contains information about them should address inquiries to the head of the Test Administration Center where they are examined. Inquiries should be written, signed, and contain full name, Social

Security Number, type of examination, examination number, and the date and place of participation in the examination.

RECORDS ACCESS PROCEDURE:

See Notification procedure above. Requests for access must also follow the USPS Privacy Act regulations regarding access to records and verification of identity (39 CFR 286.6).

CONTESTING RECORD PROCEDURES:

See Notification procedure above.

RECORD SOURCE CATEGORIES:

Information is provided by applicants taking entrance examinations.

USPS 120.130

SYSTEM NAME:

Personnel Records—Postmaster Selection Program Records. 120.130

SYSTEM LOCATION:

USPS Headquarters; Regional Headquarters

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS employees desiring to be considered for promotion to Postmaster position.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, address, date of birth, social security number, education summary, postal background other employment experience, Postal Inspector's Investigative Memorandum, and other pertinent personal information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401, 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide Regional Management Selection Board and the National Management Selection Board with fair and impartial information to match requirements for Postmaster position to the best qualified candidate.

Use—

1. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Information contained in this system of records may be disclosed to

an authorized investigator appointed by the Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

5. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Printed, typed or handwritten forms.

RETRIEVABILITY:

Applicant's name and post office for which application was made.

SAFEGUARDS:

Locked file cabinets in a secured facility.

RETENTION AND DISPOSAL:

Records for positions 24 and above are maintained at National Headquarters for two years. All records are maintained at Regional Headquarters for five years. Records are destroyed by shredding or burning.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department.

NOTIFICATION PROCEDURE:

Employees wishing to know whether this system of records contains information on them should address inquiries to the Regional Postmaster General of the region in which the application was made. Inquiries should contain full name, the postal facility to which application was made, title and place of employment.

RECORD ACCESS PROCEDURES:

See Notification procedure above.

CONTESTING RECORD PROCEDURES:

See Notification procedure above.

RECORD SOURCE CATEGORIES:

Information is obtained from the employee, postal background personnel data, and from forms completed by the employee.

SYSTEMS EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:

Reference 39 CFR 286.9 for details.

USPS 120.140**SYSTEM NAME:**

Personnel Records—Program for Alcoholic Recovery (PAR), 120.140

SYSTEM LOCATION:

PAR offices, regional headquarters and Postal Data Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS employees who volunteer for or are referred to the Program.

CATEGORIES OF RECORDS IN THE SYSTEM:

Number of counseling contracts and leave usage while participant in the Program, name and personal information necessary to assist employees in a Program of recovery.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide Counselors with information to maintain caseload and follow-up counseling of individuals under the Program. Used as a management data source for statistical reporting on the Program.

USE—

None.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Printed forms and paper files. Sick leave and Leave Without Pay information is stored on computer media.

RETRIEVABILITY:

Employee name and case number.

SAFEGUARDS:

These restricted files are maintained in locked file cabinets with limited access to PAR personnel and in secured facilities. Automated records are protected through computer password security and encoding of personal identifiers.

RETENTION AND DISPOSAL:

1. Case card is destroyed six years following close of file. 2. Correspondence and reports are destroyed three years (field) or ten years (Headquarters) after close of case file. 3. Historical case records cared is destroyed six years after close of case file. 4. Case files are destroyed three years after recovery or one year after participant terminates enrollment. Paper

records are destroyed by shredding and computer tape/disk records are destroyed by erasing.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Dept., Headquarters.

NOTIFICATION PROCEDURE:

Employees participating in the Program should address inquiries to the head of the facility where participating in the Program. Inquiries should contain employee name and location of employment. Headquarters employees should submit requests to the SYSTEM MANAGER.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

The participating employee, PAR counselor and the referring source.

USPS 120.151.**SYSTEM NAME:**

Personnel Records—Recruiting, Examining and Appointment Records, 120.151.

SYSTEM LOCATION:

U.S. Postal Service personnel offices and/or other offices within Postal Service facilities authorized to engage in recruiting or examining activities or make appointments to positions.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Job applicants.

CATEGORIES OF RECORDS IN THE SYSTEM:

Personal and professional resumes, personal applications, test scores, academic transcripts, letters of recommendation and registers of eligibles.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide managers and personnel officials information in recruiting and recommending appointment of qualified persons.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State, or local charged with the responsibility of investigating or

prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation or order issued pursuant thereto.

2. To request information from a Federal, State, or local agency maintaining civil, criminal, or other relevant enforcement or other pertinent information, relevant to a decision concerning the hiring or retention of an employee, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant or other benefit.

3. Disclosure may be made to a Federal agency in connection with the hiring or retention of an employee, the letting of a contract or issuance of a license, grant or other benefit to the extent that the information is relevant and necessary to the agency's decision on that matter.

4. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

5. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

6. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

7. Disclosure may be made from the record of an individual, where pertinent in any legal proceeding to which the Postal Service is a party before a court or administrative body.

8. Information contained in this system of records may be disclosed to an authorized investigator appointed by the United States Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issued involved in the complaint.

9. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Paper files, index cards, magnetic tape, punched cards, preprinted forms and computer printed reports.

RETRIEVABILITY:

Job applicant name and/or social security number.

SAFEGUARDS:

Paper records are maintained in closed filing cabinets under scrutiny of designated managers. Computer records are maintained in secured facilities.

RETENTION AND DISPOSAL:

Records are retained for period of usefulness which varies by type of record and ranges from one day to 10 years. Retention periods for individual record types may be found in official USPS records retention schedules. At the end of period of usefulness, records are destroyed with the exception of lists of eligibles and examination cards which are transferred to the National Personnel Records Center, St. Louis, Mo. Certain records of examination are maintained as part of USPS 120.120, Personnel Records—Personnel Research and Test Validation Records.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information is contained on them in this system of records should address inquiries to the head of the facility to which job application was made. Inquiries should contain full name, social security number, and if applicable, approximate date of application submitted and residence.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE above.

RECORD SOURCE CATEGORIES:

Individual, school officials, former employers, supervisors, named references.

SYSTEMS EXEMPTED FROM CERTAIN PROVISIONS OF THE ACT:

Reference 39 CFR 286.9 for details.

USPS 120.152

SYSTEM NAME:

Personnel Records—Career Development and Training Records, 120.152.

SYSTEM LOCATION:

Postal Education and Development Centers (PEDCs) and other facilities within the Postal Service where career development and training activities are conducted or authorized.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Current and former postal employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Career development records and applications for and records of postal and non-postal training. Also contains examination and skills bank records, including records of special qualifications, skills or knowledge; career goals; education and work histories or summaries.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401.1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide managers and supervisors with decisionmaking information to employee career development, training and assignment. Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute or rule, regulation or order issued pursuant thereto.

2. To request information from a Federal, State, or local agency maintaining civil, criminal or other relevant enforcement or other pertinent information, relevant to a decision concerning the hiring or retention of an employee, the issuance of a security clearance, the letting of a contract, or the issuance of a license, grant or other benefit.

3. Disclosure may be made to a Federal agency, in connection with the hiring or retention of an employee, the letting of a contract or issuance of a license, grant, or other benefit to the extent that the information is relevant and necessary to the agency's decision on that matter.

4. May be disclosed to the Office of Management and Budget in connection

with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

5. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

6. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

7. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

8. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Equal Employment Opportunity Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 29 CFR 1613 and the contents of the requested record are needed by the investigator in the performance of his duty in investigate a discrimination issue involved in the complaint.

9. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Paper files, index cards, magnetic tape, punched cards, preprinted forms and computer printed reports.

RETRIEVABILITY:

Employee name and social security number.

SAFEGUARDS:

Paper records are maintained in closed filing cabinets under scrutiny of designated managers. Computer records are maintained in secured facilities.

RETENTION AND DISPOSAL:

Records are retained for a period of usefulness which varies by type of record and ranges from one to 10 years. Retention periods for individual record types may be found in official USPS records retention schedules. At the end of period of usefulness, records are destroyed. Certain records of examinations are maintained as part of

USPS 120.120, Personnel Records—
Personnel Research and test Validation
Records.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations
Department, APMG, Real Estate and
Buildings Department, and APMG,
Customer Services Department,
Headquarters.

NOTIFICATION PROCEDURE:

Current and former field employees
wishing to know whether information is
contained on them in this system of
records should address inquiries to the
head of the appropriate employment
facility. Headquarters employees should
submit requests to the System Manager.
Inquiries should contain full name and
social security number.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE
above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE
above.

RECORD SOURCE CATEGORIES:

Information is obtained from the
subject, subject's employment records
and his/her supervisor.

**SYSTEMS EXEMPTED FROM CERTAIN
PROVISIONS OF THE ACT:**

Reference 39 CFR 266.9 for details.

USPS 120.153

SYSTEM NAME:

Personnel Records—Individual
Performance Evaluation/M Measurement,
120.153.

SYSTEM LOCATION:

U.S. Postal Service facilities where
individual performance evaluation/
measurement activities are conducted.

**CATEGORIES OF INDIVIDUALS COVERED BY THE
SYSTEM:**

Current and former postal employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Individual performance evaluation
and measurement records.

**AUTHORITY FOR MAINTENANCE OF THE
SYSTEM:**

39 USC 401, 1001.

**ROUTINE USES OF RECORDS MAINTAINED IN
THE SYSTEM, INCLUDING CATEGORIES OF
USERS AND THE PURPOSES OF SUCH USES:**

Purpose—To provide managers and
supervisors with decision making
information for training needs,
promotion and assignment
considerations, or other employee/job
related actions.

1. To refer where there is an
indication of a violation or potential
violation of law, whether civil, criminal
or regulatory in nature, to the
appropriate agency, whether Federal,
State, local or foreign, charged with the
responsibility of investigating or
prosecuting such violation or charged
with enforcing or implementing the
statute, or rule, regulation or order
issued pursuant thereto.

2. To request information from a
Federal, State, or local agency
maintaining civil, criminal, or other
relevant enforcement or other pertinent
information, relevant to a decision
concerning the hiring or retention of an
employee, the issuance of a security
clearance, the letting of a contract, or
the issuance of a license, grant or other
benefit.

3. Disclosure may be made to a
Federal agency in connection with the
hiring or retention of an employee, the
letting of a contract or issuance of a
license, grant or other benefit to the
extent that the information is relevant
and necessary to the agency's decision
on that matter.

4. May be disclosed to the Office of
Management and Budget in connection
with the review of private relief
legislation as set forth in OMB Circular
No. A-19 at any stage of the legislative
coordination and clearance process as
set forth in that Circular.

5. Pursuant to the National Labor
Relations Act, records from this system
may be furnished to a labor organization
upon its request when needed by that
organization to perform properly its
duties as the collective bargaining
representative of postal employees in an
appropriate bargaining unit.

6. Disclosure may be made to a
congressional office from the record of
an individual in response to an inquiry
from the congressional office made at
the request of that individual.

7. Disclosure may be made from the
record of an individual, where pertinent,
in any legal proceeding to which the
Postal Service is a party before a court
or administrative body.

8. Information contained in this
system of records may be disclosed to
an authorized investigator appointed by
the United States Civil Service
Commission, upon his request, when
that investigator is properly engaged in
the investigation of a formal complaint
of discrimination filed against the U.S.
Postal Service under 5 CFR 713, and the
contents of the requested record are
needed by the investigator in the
performance of his duty to investigate a
discrimination issued involved in the
complaint.

9. Inactive records may be transferred
to a GSA Federal Records Center prior
to destruction.

**POLICIES AND PRACTICES FOR STORING,
RETRIEVING, ACCESSING, RETAINING, AND
DISPOSING OF RECORDS IN THE SYSTEM.**

STORAGE:

Paper filed, index cards, magnetic
tape, punched cards, preprinted forms
and computer printed reports.

RETRIEVABILITY:

Employee name and social security
number.

SAFEGUARDS:

Paper records are maintained in
closed filing cabinets under scrutiny of
designated managers. Computer records
are maintained in secured facilities.

RETENTION AND DISPOSAL:

Records are retained for period of
usefulness which varies by type of
record and ranges from one to 10 years.
Retention periods for individual record
types may be found in official USPS
records retention schedules. PES Merit
Evaluation forms are physically
maintained on the left side of the
Official Personnel Folder (USPS 120.070)
for a period of two years. At the end of
the period of usefulness records are
destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

Assistant Postmaster General having
jurisdiction over the functional or
administrative area which developed
the particular performance evaluation/
measurement procedure.

NOTIFICATION PROCEDURE:

Current and former field employees
wishing to know whether information is
maintained on them in this system of
records should address inquiries to the
head of the appropriate employment
facility. Headquarters employees should
submit requests to the System Manager.
Inquiries should contain full name and
social security number.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE
above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE
above.

RECORD SOURCE CATEGORIES:

Information is obtained from the
subject, subject's employment records
and his/her supervisor, or program
director.

USPS 120.180**SYSTEM NAME:**

Personnel Records—Skills Bank
(Human Resources Records), 120.180.

SYSTEM LOCATION:

Maintained by various postal facilities as determined by management.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Skills bank records are maintained on different categories of USPS employees, Women, PCES and employees in various job categories.

CATEGORIES OF RECORDS IN THE SYSTEM:

Employee name, social security number, address, job position, sex, educational background, work history, salary history, skills, licenses, language, career preferences, geographical preferences, special achievements, merit awards, project assignments, benefits, and other personal information. (The various systems in existence may contain more or less information than specified herein.)

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Public Law 92-261, 39 USC 401, 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—Used by USPS management to place employees in new positions, and to assist in career planning and training in general; also used by management to provide statistics for management of personnel. /Use—

1. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

2. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Preprinted forms, magnetic tape and disk files, computer reports, and microfiche.

RETRIEVABILITY:

Name and social security number.

SAFEGUARDS:

Locked file cabinets, controlled access, computer password authentication, magnetic tape library, physical security.

RETENTION AND DISPOSAL:

Paper records will be destroyed 1 or 2 years after information is successfully entered into the system depending upon the particular program involved, by shredding or burning. Automated information will be erased 1 year after employee is terminated or is no longer in the particular job category.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations
Department, Headquarters.

NOTIFICATION PROCEDURE:

Employees wishing to know whether such a system exists at their place of employment or whether information about them is maintained in this system of records should address inquiries to the head of the facility where employed. Headquarters employees should submit requests to the System Manager. Inquiries should contain full name, social security number, and place of employment.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURES above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURES above.

RECORD SOURCE CATEGORIES:

Information is obtained directly from employee and USPS personnel forms and reports.

USPS 120.190**SYSTEM NAME:**

Personnel Records—Supervisors
Personnel Records, 120.190.

SYSTEM LOCATION:

Any Postal facility.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS Employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Records consist of summaries or excerpts from the following other USPS personnel systems: 120.036, 120.070, 120.150, 120.180, 120.210; as well as records of discipline. In addition, copies of other Postal Service records and records originated by the supervisor may be included at the supervisor's discretion.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401, 1001.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To enable supervisors to efficiently manage assigned personnel.
Use—

1. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

2. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

3. Disclosure of records of discipline may be further made to a labor organization pursuant to the National Labor Relations Act upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

4. Records of discipline may become part of USPS 120.070 and would therefore be subject to disclosure under the routine uses of that system of records.

5. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Paper files, index cards, magnetic tape and disk, computer printouts.

RETRIEVABILITY:

Indexed by employee name.

SAFEGUARDS:

Paper documents/index cards are locked in supervisors desk or filing cabinets. Computer readable media are maintained in secured data processing facilities.

RETENTION AND DISPOSAL:

1. Except for those records of discipline described in subparagraphs 2, 3, and 4 below, supervisor's personnel records may be retained for the duration of the supervisor-employee working relationship. Upon separation of an employee from the Postal Service, the entire file pertaining to that employee is destroyed by burning or shredding within 30 days.

2. Counseling Records shall be destroyed after one year if there has been no disciplinary action initiated against the employee during that period.

3. Letters of Warning shall be destroyed after two years if there has been no disciplinary action initiated against the employee during that period.

4. A record of counseling, a letter of warning, or other disciplinary record, which has been relied upon in a subsequent suspension or discharge, will be retained in this system in accord with subparagraphs 1 through 3 above. Such records also will be permanently filed in USPS 120.070, if the subsequent suspension or discharge ultimately is sustained or modified in a manner requiring the preparation of a Form 50.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Employee Relations Department, Headquarters.

NOTIFICATION PROCEDURE:

Employees wishing to know whether this system of records contains information on them should address inquiries to the head of the facility where employed. Headquarters employees should submit requests to the System Manager.

RECORD ACCESS PROCEDURES:

See Notification procedure above.

CONTESTING RECORD PROCEDURES:

See Notification procedure above.

RECORD SOURCE CATEGORIES:

Other personnel records systems, supervisor notes, employees, postal customers.

USPS 120.210**SYSTEM NAME:**

Personnel Records—Vehicle Maintenance Personnel and Operators Records, 120.210.

SYSTEM LOCATION:

Vehicle Service Operations at Post Offices, Sectional Centers, District Offices, Regional Offices, Headquarters, Bulk Mail Centers, Postal Data Centers and Automatic Data Processing Centers.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS employees.

CATEGORIES OF RECORDS IN THE SYSTEM:

Employee workload, work schedule, performance analysis and work habits. Employee name, age, length of service, physical condition, vehicle accidents, driving citations, safety awards records, driver license revocation and suspension, driving habits, vehicle training, results of driving tests, qualifications to drive vehicles.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To provide local post office managers, supervisors and Director of Fleet Management Operations with information to adjust workload, change schedules, change type equipment operated, lists of equipment assigned to employee, and used as a basis for corrective action or safe driving awards.

Use—

1. To provide GSA and USPS driver credentials.

2. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, rule, regulation or order issued pursuant thereto.

3. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any state of the legislative coordination and clearance process as set forth in that Circular.

4. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

5. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry

from the congressional office made at the request of that individual.

6. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

7. Information contained in this system of records may be disclosed to an authorized investigator appointed by the United States Civil Service Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 5 CFR 713, and the contents of the requested record are needed by the investigator in the performance of his duty to investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Printed forms, and computer tapes.

RETRIEVABILITY:

Employee name, vehicle number, route number, work order number and facility name.

SAFEGUARDS:

Records are maintained in closed file cabinets in secured facilities.

RETENTION AND DISPOSAL:

a. Records pertaining to postal-owned vehicle driver's individual testing and driver's records are retained for three years after separation of the employee and destroyed by shredding.

b. Accident reports are retained for three years and destroyed by shredding.

c. Inspection reports are retained for two years after the date of the report and destroyed by shredding.

d. Other records are retained as long as the individual is employed as a vehicle operator, held for one year from the date of reassignment and destroyed by shredding.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Delivery Services Department, Headquarters.

NOTIFICATION PROCEDURE:

Employees wishing to know whether information about them is maintained in this system of records should address inquiries to the head of the facility where employed. Inquiries should contain employee's full name, social security number, route number, work station and facility where employed.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

The employee, medical doctors, driver examiner/instructor state vehicle departments and supervisors.

USPS 120.230

SYSTEM NAME:

Personnel Records—Adverse Action Appeals (Administrative Litigation Case Files) 120.230.

SYSTEM LOCATION:

Law Department, Regional and National Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Employees involved in Veterans' Appeal and other adverse action appeals.

CATEGORIES OF RECORDS IN THE SYSTEM:

(a) Formal pleadings and memoranda of law; (b) other relevant documents; (c) Miscellaneous notes and case analyses prepared by Postal Service attorneys and other personnel; (d) Correspondence and telephone records.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 409(d).

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used to provide legal advice and representation to the Postal Service.

Use—

1. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

2. Disclosure may be made from the record of an individual, where pertinent in any legal proceeding to which the Postal Service is a party before a court or administrative body or other tribunal.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

Transferred to Department of Justice, when needed by that department to perform properly its duties as legal representative of the Postal Service.

5. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal,

State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Paper documents and computer tape/disk.

RETRIEVABILITY:

By name of litigant(s).

SAFEGUARDS:

Folders containing paper documents are kept in locked filing cabinets under the general scrutiny of Postal Service attorneys. Computer terminals are located in a secured area.

RETENTION AND DISPOSAL:

Selected records are maintained on an active basis until subject matter has no information value, and on an inactive basis for an additional three years. All other records are maintained for five years. Paper records are shredded and computer tape/disk records are erased at the end of retention period.

SYSTEM MANAGER(S) AND ADDRESS:

General Counsel, Law Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons interested in reviewing records within specific case files should submit their name; and case number, if known, to the General Counsel, Law Department, National Headquarters.

RECORD ACCESS PROCEDURES:

See "System Manager" above.

CONTESTING RECORD PROCEDURES:

See "System Manager" above.

RECORD SOURCE CATEGORIES:

(a) Employees involved in Veterans Appeals and other adverse actions appeals; (b) Counsel(s) or other representative(s) for parties in administrative litigation other than Postal Service; (c) Other individuals involved in appeals. Source documents include the formal case file, and other records relevant to the case.

USPS 120.240

SYSTEM NAME:

Personnel Records—Garnishment Case Files, 120.240.

SYSTEM LOCATION:

Law Department, Headquarters, Regional Counsel Offices, Regional Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Employees involved in garnishment cases.

CATEGORIES OF RECORDS IN THE SYSTEM:

(a) Formal pleadings and memoranda of law; (b) other relevant documents; (c) Miscellaneous notes and case analyses prepared by Postal Service attorneys and other personnel; (d) Correspondence and telephone records.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 409(d)

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used to provide legal advice and representation to the Postal Service.

Use—

1. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

2. Disclosure may be made from the record of an individual, where pertinent in any legal proceeding to which the Postal Service is a party before a court or administrative body or other tribunal.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Transferred to Department of Justice, when needed by that department to perform properly its duties as legal representative of the Postal Service.

5. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Paper documents and computer tape/disk.

RETRIEVABILITY:

By name of litigant(s) of case and State of court action.

SAFEGUARDS:

Folders containing paper documents are kept in locked filing cabinets under the general scrutiny of Postal Service attorneys. Computer terminals are located in a secured area.

RETENTION AND DISPOSAL:

Selected records are maintained on an active basis until subject matter has no information value, and on an inactive basis for an additional three years. All other records are maintained for five years. Paper records are shredded and computer tape/disk records are erased at the end of retention period.

SYSTEM MANAGER(S) AND ADDRESS:

General Counsel, Law Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons interested in reviewing records within specific case files should submit their name; and case number, if known, to the General Counsel, Law Department, National Headquarters.

RECORD ACCESS PROCEDURES:

See "System Manager" above.

CONTESTING RECORD PROCEDURES:

See "System Manager" above.

RECORD SOURCE CATEGORIES:

(a) Employees involved in garnishment cases; (b) Counsel(s) or other representative(s) for parties other than Postal Service; (c) Other individuals involved in garnishment cases. Source documents include internal memoranda and court related documents.

USPS 130.010

SYSTEM NAME:

Philately—Ben Franklin Stamp Club Sponsors and Direct Mail Responders List, 130.010

SYSTEM LOCATION:

Customer Services Department, Headquarters, and at a contractor computer center.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Adult sponsors of stamp clubs for youth groups as well as club presidents of adult groups.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name and address of club sponsors or presidents.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401.404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—As an adjunct to a philatelic program, lists of club sponsors or presidents of stamp clubs are used by Sectional Center personnel and District personnel as well as individual postmasters as follows:

1. To assist sponsors in forming stamp clubs.
2. Making contact with clubs to assist in program presentation and USPS cooperation at stamp shows and philatelic exhibits.
3. Responsiveness to philatelic sales requests.
4. Determining USPS needs for films, graphics, and publications related to philately.
5. To mail newsletters to stamp club sponsors and club presidents.

Use—

1. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.
2. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court of administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:**STORAGE:**

Paper files and computer tape/disk.

RETRIEVABILITY:

Indexed by name of individual and ZIP Code within the club or stamp group to which he/she is associated.

SAFEGUARDS:

Paper records are maintained in locked steel file cabinets in a secured facility; computer media are stored in a fire resistant and secured facility.

RETENTION AND DISPOSAL:

Records are maintained on a year-to-year basis subject to reverification each year. At the end of retention period, paper records are shredded and computer tape/disk records are erased.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Customer Services Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address

inquiries to the System Manager above. Inquiries should contain full name, address, and the club or stamp group with which he/she is associated.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE above.

RECORD SOURCE CATEGORIES:

Information is obtained from the individual to which the record refers.

USPS 130.040

SYSTEM NAME:

Philately—Philatelic Product Sales and Distribution, 130.040.

SYSTEM LOCATION:

USPS Headquarters, Customer Services Department and at a contractor site.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Customers who have initiated correspondence expressing an interest in philately by (1) responding to various philatelic product sales promotion programs by submitting order forms, business reply cards, or cut outs from posters and promotional literature, (2) providing postal clerks with name and address information to receive future philatelic product announcements, (3) opening subscription accounts for philatelic products, or (4) requesting products in unsolicited correspondence, such as letters.

CATEGORIES OF RECORDS IN THE SYSTEM:

Customer/subscriber name and account number, address, funds on deposit, remittance type and amount order/product specifications, order history; also, special lists identifying individuals who have submitted bad checks, special services customers/subscribers, and individuals who have registered multiple service complaints.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C 401, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—(1) to operate a subscription service for customers who remit money for a particular philatelic product or products; (2) to maintain a file to send philatelic product announcements and sales literature to customers or subscribers; (3) to serve, as a source for statistical data for research and market

analysis, billing and inventory data, and mailing basis for product shipment and (4) to identify discrete groups of customers/subscribers for better order control and service.

Use—

1. Disclosure may be made where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation or order issued pursuant thereto.

2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Maintained in original typed or handwritten form, or microform, and on magnetic tape or disk and computer printouts.

RETRIEVABILITY:

Records are indexed by customer/subscriber name and by account number, if assigned.

SAFEGUARDS:

Paper and microform records are maintained in closed filing cabinets under general scrutiny of personnel of the Phalatic Sales Division and the Building Security Guard Force, and when maintained on magnetic tape and disk, the information is protected by ADP physical, technical software and administrative security of the Headquarters Data Center or by contractors providing similar protection which is subject to the audit and inspection of the USPS Inspection Service.

RETENTION AND DISPOSAL:

ADP and microform records are maintained for three years after the individual has failed to make a purchase or has indicated no other interest. ADP records are obliterated after their period of usefulness; microform records are incinerated. Correspondence and other paper documents are retained for 3 years and then destroyed by shredding.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Customer Services Department, Headquarters.

NOTIFICATION PROCEDURE:

Individuals wishing to know whether information about them is maintained in this system of records should address inquiries to the System Manager above. Inquiries should contain full name and address.

RECORD ACCESS PROCEDURES:

See Notification procedure above.

CONTESTING RECORD PROCEDURES:

See Notification procedure above.

RECORD SOURCE CATEGORIES:

Information is obtained directly from the individual as is described in "Category of Individuals Covered by the System" above.

USPS 140.020

SYSTEM NAME:

Postage—Postal Meter Records, 140.020.

SYSTEM LOCATION:

Post Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Meters users.

CATEGORIES OF RECORDS IN THE SYSTEM:

Customer name and address, meter update activity, schedule for meter upgradings for on-site meter settings, license application, and transaction documents.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To enable responsible administration of postal meter activities.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. To disclose identity and address of meter user and identity of agent of user to any member of public upon request.

3. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization

upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

4. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

5. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Printed forms.

RETRIEVABILITY:

Records are indexed by customer name and by numeric file of postage meters.

SAFEGUARDS:

Records are maintained in closed file cabinets in secured facilities.

RETENTION AND DISPOSAL:

Records are maintained for one year after final entry or the duration of the license and then destroyed by shredding.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Rates and Classification Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the local postmaster from which license was obtained supplying name and meter number.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Information is obtained from the individual and officials making entries to reflect activities.

USPS 150.010

SYSTEM NAME:

Records and Information Management Records—Information Disclosure Accounting Records (Freedom of Information Act), 150.010.

SYSTEM LOCATION:

Records Officer, USPS Headquarters, and records Custodians at all USPS facilities.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

USPS employees and citizens requesting information under the Freedom of Information Act.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name of requestor and the type of information requested.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 412, 5 USC 552; Public Law 93-502.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—Those records are kept in order to determine the status of information requested and to facilitate the processing of requests.

Use—

1. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.
2. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Paper files.

RETRIEVABILITY:

Individuals name and date of request.

SAFEGUARDS:

Locked file drawers and access control.

RETENTION AND DISPOSAL:

Records are maintained by Custodians and the Records Officer for a period of two years. The Headquarters Library and General Counsel keep permanently copies of legal proceedings and appeals related to these records.

SYSTEM MANAGER(S) AND ADDRESS:

Postal Service Records Officer, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the Custodian at the facility where request was sent. Inquiries

should contain full name and date of request.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Information is obtained from the individual making the request.

USPS 150.015**SYSTEM NAME:**

Records and Information Management Records—Freedom of Information Appeals System. 150.015

SYSTEM LOCATION:

USPS National Headquarters, Law Department.

CATEGORIES OF INDIVIDUAL COVERED BY THE SYSTEM:

The system encompasses all individuals who submit appeals under the Freedom of Information Act from denials of access to or copies of records maintained by the Postal Service.

CATEGORIES OF RECORDS IN THE SYSTEM:

The system consists of copies of all correspondence relating to appeals from the denials of requests for access to or copies or records pursuant to the Freedom of Information Act, of pleadings on civil actions arising under the Act, and of other documents incidental thereto.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

5 USC 552.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSE OF SUCH USES:

Purpose—To enable the General Counsel to carry out his duties as appellate authority and to comply with reporting requirements. Use—

1. These records are used to provide information and records to the Department of Justice in its coordination of responses to requests for information and its representation of the Postal Service in civil actions, and to prepare reports required by 5 USC 552(d).
2. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.
3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

These records are stored in paper folders.

RETRIEVABILITY:

Alphabetically, by name of the requester except in those instance where a requester has an appeal filed on his behalf by an attorney. In those cases, the attorney's name might appear as the requester appellant.

SAFEGUARDS:

These records are stored in locked filed cabinets.

RETENTION AND DISPOSAL:

These records are kept indefinitely.

SYSTEM MANAGER(S) AND ADDRESS:

General Counsel, Law Department, National Headquarters.

NOTIFICATION PROCEDURE:

Inquiries should be addressed to the System Manager above and should contain the name of the requester and the name of that person's attorney.

USPS 150.020**RECORD ACCESS PROCEDURES:**

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

The individual to whom the record pertains, and that person's attorney.

SYSTEM NAME:

Records and Information Management Records—Information Disclosure Accounting Records (Privacy Act), 150.020.

SYSTEM LOCATION:

Records Officer, USPS Headquarters and records Custodians at all USPS facilities.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Any USPS employee or citizen who makes an inquiry under the Privacy Act.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name of inquirer and the type of information requested and USPS response thereto.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401; Public Law 93-579,88 Statute 1896.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—These records are to provide information related to requestors of personal information under the Privacy Act.

Use—

1. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

2. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Paper files.

RETRIEVABILITY:

Requesters' name and date of inquiry.

SAFEGUARDS:

Locked file drawers and access control.

RETENTION AND DISPOSAL:

Request letters and related correspondence are retained for two years. Accountings of disclosures are retained for five years or the life of the disclosed record, whichever is longer. All records are destroyed by burning or shredding.

SYSTEM MANAGER(S) AND ADDRESS:

Postal Service Records Officer,
Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the Custodian at the facility where request was sent. Inquiries should contain full name, and date of the request.

RECORD ACCESS PROCEDURES:

See "NOTIFICATION" above.

CONTESTING RECORD PROCEDURES:

See "NOTIFICATION" above.

RECORD SOURCE CATEGORIES:

Information is obtained from the individual making the request.

USPS 160.010

SYSTEM NAME:

Special Mail Services—Insured and Registered Domestic Mail Inquiry and Application for Indemnity Records, 160.010.

SYSTEM LOCATION:

Rates and Classification Department, Headquarters, Postal Data Center, St. Louis, MO, and Post Offices.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Insured and registered domestic mail claimants/inquiries including mail senders and addresses.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name and address of mail sender and addressee; declaration of claimant/inquirer, claim/inquiry status information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used in responding to inquiries on the status of domestic insured and registered mail, and in the adjudication of claims related to such mail.

Use—

1. To refer where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State or local charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, rule, regulation or order issued pursuant thereto.

2. To a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Where pertinent, in any legal proceeding to which the Postal Service is a party before a court of administrative body.

4. Pursuant to the National Labor Relations Act, to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

5. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM:

STORAGE:

Handwritten and typed forms, microfilm, computer readable media and printouts.

RETRIEVABILITY:

Claimant/inquirer name, case number, registered article number.

SAFEGUARDS:

Handwritten and typed forms are maintained in steel file cabinets with use limited to claims personnel. Computer readable media are stored in protected areas, and access to the media is confined to authorized data processing personnel.

RETENTION AND DISPOSAL:

Domestic inquiries are maintained for two years. Claim records are maintained for one year at St. Louis Postal Data Center and then transferred to the Federal Records Center and maintained for another three years. All records are destroyed by shredding.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Rates and Classification Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the head of the facility where the insured or registered domestic claim was filed. If claim has been filed, inquiry should include claim number, date of claim, insured or registered number of article mailed.

RECORD ACCESS PROCEDURES:

NOTIFICATION PROCEDURE above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE above.

RECORD SOURCE CATEGORIES:

Information from the individual completing the claim/inquiry form.

USPS 160.020

SYSTEM NAME:

Special Mail Services—Insured and Registered International Mail Inquiry and Application for Indemnity Records, 160.020.

SYSTEM LOCATION:

Rates and Classification Department, USPS Headquarters; Postal Data Center, St. Louis, MO; and International Adjusting Offices in Chicago, New York, New Orleans and San Francisco.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Insured and registered international mail claimants/inquirers, including mail senders and addresses, declaration of claimants/inquirers, claim/inquiry status information.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used in responding to inquiries regarding international mail, and in the adjudication of insured and registered international mail claims.

Use—

1. To refer where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether international, Federal, State or local charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, rule, regulation or order issued pursuant thereto.

2. To a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

3. Where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

4. Pursuant to the National Labor Relations Act, to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

5. To refer an international mail inquiry or claim to the appropriate foreign postal authority when required for claim resolution.

6. Inactive records may be transferred to a GSA Federal Records Center prior to destruction.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Handwritten and typed forms, microfilm, computer readable media and printouts.

RETRIEVABILITY:

Claimant/inquirer name, case number, registered article number.

SAFEGUARDS:

Handwritten and typed forms are maintained in steel file cabinets with use limited to claims personnel. Computer readable media are stored in protected areas, and access to the media is confined to authorized data processing personnel.

RETENTION AND DISPOSAL:

International inquiries are maintained for three years. Claim records are maintained for one year at St. Louis Postal Data Center and then transferred to the Federal Records Center and maintained for another three years. All records are destroyed by shredding.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Rate and Classification Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons wishing to know whether information about them is maintained in this system of records should address inquiries to the head of the facility where the insured or registered foreign mail claim was filed. If claim has been filed, inquiry should include claim number, date of claim, insured or registered number of article mailed.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE above.

RECORD SOURCE CATEGORIES:

Information from the individual completing the claim/inquiry form.

USPS 160.030**SYSTEM NAME:**

Special Mail Services—Express Mail Service Insurance Claims for Loss Delay and Damage, 160.030.

SYSTEM LOCATION:

St. Louis Postal Data Center, St. Louis, MO.

CATEGORIES OF RECORDS IN THE SYSTEM:

Postal Service forms and correspondence related to the claims.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 404.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used in the adjudication of express mail service claims for loss, delay and damage.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether international, Federal, State or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or

implementing the statute, rule, regulation or order issued pursuant thereto.

2. Pursuant to the National Labor Relations Act, to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

3. To a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

5. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Stored in file cabinets in original, typed, handwritten, copied or printed form.

RETRIEVABILITY:

Claims are ordered by date of mailing but are retrieved by name of claimant through visual scanning.

SAFEGUARDS:

Maintained in steel file cabinets within the exclusive custody of Express Mail Marketing personnel in the Customer Services Department and Claims Personnel in the Rates and Classification Department.

RETENTION AND DISPOSAL:

Records are retained for one year then destroyed by shredding.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Rates and Classification Department, Headquarters.

NOTIFICATION PROCEDURE:

Claimants wishing to know whether information about them is maintained in this system of records should address inquiries to the SYSTEM MANAGER.

RECORD ACCESS PROCEDURES:

See NOTIFICATION PROCEDURE above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION PROCEDURE above.

RECORD SOURCE CATEGORIES:

Information is obtained from the claimant or designated representative.

USPS 190.030

SYSTEM NAME:

Litigation Records—Labor Law Topic Files, 190.030.

SYSTEM LOCATION:

Law Department, National Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals involved in employee and labor relations matters.

CATEGORIES OF RECORDS IN THE SYSTEM:

(a) Miscellaneous notes, memoranda of law, and case analyses prepared by Postal Service attorneys and personnel; (b) Other relevant documents; (c) Correspondence and telephone records.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 U.S.C. 401, 409(d).

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used to provide legal advice and representation to the Postal Service.

Use—

1. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

2. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body or other tribunal.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Transferred to the Department of Justice, when needed by that department to perform properly its duties as legal representative of Postal Service.

5. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Paper documents and computer tape/disk.

RETRIEVABILITY:

By topic title or name of individual.

SAFEGUARDS:

Topic folders are kept in locked filing cabinets under the general scrutiny of Postal Service attorneys. Computer terminals and tape/disk files are located in a secured area.

RETENTION AND DISPOSAL:

Selected records are maintained on an active basis until subject matter has no information value, and on inactive basis for an additional three years. All other records are maintained for five years. Paper records are shredded and computer tape/disk records are erased at the end of retention period.

SYSTEM MANAGER(S) AND ADDRESS:

General Counsel, Law Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons interested in reviewing records within specific files should submit their name and file topic title, if known, to the General Counsel, Law Department, Headquarters.

RECORD ACCESS PROCEDURES:

See Notification Procedure above.

CONTESTING RECORD PROCEDURES:

See Notification Procedure above.

RECORD SOURCE CATEGORIES:

(a) Individuals involved in employee and labor relations matters; (b) Counsel(s) or other representative(s) for parties in an action other than the Postal Service; (c) Other individuals involved in this matter. Source documents include internal memoranda, court related documents, case files and other relevant records.

USPS 200.010

SYSTEM NAME:

Non-Mail Monetary Claims—Relocation Assistance Claims, 200.010

SYSTEM LOCATION:

USPS National Headquarters (Real Estate and Buildings Department), Washington, D.C. 20260, and all Regional Real Estate and Buildings Departments.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Owners and tenants of real property purchased or leased by the U.S. Postal Service.

CATEGORIES OF RECORDS IN THE SYSTEM:

Completed claim forms and other documents related to indemnifying occupants of property acquired by the U.S. Postal Service.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) and 39 USC 401.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used to adjudicate claims for reimbursement of relocation expenses incurred by owners and tenants of real property acquired by the U.S. Postal Service.

Use—

1. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of legislative coordination and clearance process as set forth in that Circular.

3. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body, or in connection with the settlement of any claim or the resolution of any dispute.

4. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, rule, regulation, or order issued pursuant thereto.

5. Inactive records may be transferred to a GSA Federal Records Center for storage prior to destruction.

6. May be disclosed to a Federal compliance investigator for case or program review.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Stored in file cabinets in original, typed, printed or handwritten form.

RETRIEVABILITY:

Claims are ordered and retrieved alphabetically by claimant name within project file.

SAFEGUARDS:

Maintained in locked file cabinets within the exclusive custody of Real Estate and Buildings Department management personnel.

RETENTION AND DISPOSAL:

Records are retained for the life of the facility and then destroyed.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Real Estate and Buildings Department, Headquarters.

NOTIFICATION PROCEDURE:

Claimants wishing to know whether and what information about them is maintained in this system of records should address inquiries to the same facility to which they applied for relocation benefits.

RECORD ACCESS PROCEDURES:

See NOTIFICATION Procedure above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION Procedure above.

RECORD SOURCE CATEGORIES:

Information is obtained from previous dwelling owner or tenant claimant and Postal Service claim reviewers and adjudicators.

USPS 200.020**SYSTEM NAME:**

Non-Mail Monetary Claims—Monetary Claims Involving Present or Former employees (case files), 200.020

SYSTEM LOCATION:

Law Department, Headquarters, Regional Counsel Offices, Regional Headquarters.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals involved in monetary claims cases.

CATEGORIES OF RECORDS IN THE SYSTEM:

(a) Formal pleadings and memoranda of law; (b) Other relevant documents; (c) Miscellaneous notes and case analyses prepared by Postal Service Attorneys and other personnel; (d) Correspondence and telephone records.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401, 409(d).

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—This information is used to provide legal advice and representation to the Postal Service.

Use—

1. Pursuant to the National Labor Relations Act, records from this system may be furnished to a labor organization upon its request when needed by that organization to perform properly its duties as the collective bargaining representative of postal employees in an appropriate bargaining unit.

2. Disclosure may be made from the record of an individual, where pertinent in any legal proceeding to which the Postal Service is a party before a court or administrative body or other tribunal.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Transferred to the Department of Justice, when needed by that department to perform properly its duties as legal representative of the Postal Service.

5. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal, or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.**STORAGE:**

Paper documents and compute tape/disk.

RETRIEVABILITY:

By name of litigant(s).

SAFEGUARDS:

Folders containing paper documents are kept in locked filing cabinets under the general scrutiny of Postal Service attorneys. Computer terminals and tape/disk files are located in a secured area.

RETENTION AND DISPOSAL:

Selected records are maintained on an active basis until subject matter has no information value, and on an inactive basis for an additional three years. All other records are maintained for five years. Paper records are shredded and computer tape/disk records are erased at the end of retention period.

SYSTEM MANAGER(S) AND ADDRESS:

General Counsel, Law Department, Headquarters.

NOTIFICATION PROCEDURE:

Persons interested in reviewing records within specific case files should submit their name; and case number, if known, to the General Counsel, Law Department, National Headquarters.

RECORD ACCESS PROCEDURES:

See "System Manager" above.

CONTESTING RECORD PROCEDURES:

See "System Manager" above.

RECORD SOURCE CATEGORIES:

(a) Individuals involved in monetary claims cases, (b) Counsel(s) or other representatives for parties in litigation other than Postal Service. Source documents include records relevant to the case.

USPS 210.020**SYSTEM NAME:**

Contractor Records—Driver Screening System Assignment Records, 210.020.

SYSTEM LOCATION:

Mail Processing Department, Headquarters, Regional Offices; Sectional Centers; Bulk Mail Centers; District Offices; Post Offices; Postal Data Centers; and Transportation Management Offices (TMOs).

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Persons under a highway contract with the USPS.

CATEGORIES OF RECORDS IN THE SYSTEM:

Name, social security number and highway contract to which assigned.

AUTHORITY FOR MAINTENANCE OF THE SYSTEM:

39 USC 401.

ROUTINE USES OF RECORDS MAINTAINED IN THE SYSTEM, INCLUDING CATEGORIES OF USERS AND THE PURPOSES OF SUCH USES:

Purpose—To ascertain employees having an assignment requiring access to mail or postal premises under contract with the USPS.

Use—

1. To refer, where there is an indication of a violation or potential violation of law, whether civil, criminal or regulatory in nature, to the appropriate agency, whether Federal, State, or local, charged with the responsibility of investigating or prosecuting such violation or charged with enforcing or implementing the statute, or rule, regulation, or order issued pursuant thereto.

2. May be disclosed to the Office of Management and Budget in connection with the review of private relief legislation as set forth in OMB Circular No. A-19 at any stage of the legislative coordination and clearance process as set forth in that Circular.

3. Disclosure may be made to a congressional office from the record of an individual in response to an inquiry from the congressional office made at the request of that individual.

4. Disclosure may be made from the record of an individual, where pertinent, in any legal proceeding to which the Postal Service is a party before a court or administrative body.

5. Information contained in this system of records may be disclosed to an authorized investigator appointed by the Equal Employment Opportunity Commission, upon his request, when that investigator is properly engaged in the investigation of a formal complaint of discrimination filed against the U.S. Postal Service under 29 CFR 1613 and the contents of the requested record are needed by the investigator in the performance of his duty of investigate a discrimination issue involved in the complaint.

POLICIES AND PRACTICES FOR STORING, RETRIEVING, ACCESSING, RETAINING, AND DISPOSING OF RECORDS IN THE SYSTEM.

STORAGE:

Originally typed, printed or handwritten form; magnetic tape and computer printed reports.

RETRIEVABILITY:

Primarily by highway contract and postal locations serviced; secondarily, by individual's social security number and name.

SAFEGUARDS:

Through computerized codes and passwords, access is restricted to offices that are the authority for a specific contract and to only those post offices serviced by the contract.

RETENTION AND DISPOSAL:

Records are held one year after the contract expires, or one year following an individual's employment termination with a company that has been awarded a highway contract.

SYSTEM MANAGER(S) AND ADDRESS:

APMG, Mail Processing Department, Headquarters.

NOTIFICATION PROCEDURE:

Contractors wishing to know whether information about them is maintained in this system of records should address inquiries to the TMO Manager. Inquiries should contain full name and highway contract number.

RECORD ACCESS PROCEDURES:

See NOTIFICATION above.

CONTESTING RECORD PROCEDURES:

See NOTIFICATION above.

RECORD SOURCE CATEGORIES:

Information is obtained from the contractor.

List of U.S. Postal Service Facilities Referenced Herein.

The address of each Postal Service facility to which requests may be sent (referred to in systems descriptions), other than post offices and the geographical area served, is provided below. The addresses of individual post offices are not provided because of their large number and because that information is available locally to all concerned individuals.

The addresses of all Postal facilities, including locations in Puerto Rico, and the Virgin Islands are contained in THE NATIONAL ZIP CODE AND POST OFFICE DIRECTORY, Publication 65, STOCK NUMBER 039-000-00261-2, available for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Postmasters, upon request, will supply the addresses of the Management Sectional Centers and District Offices to which they report.

The following excerpts of addresses and areas serviced is provided for convenience of Privacy Act correspondents, and obviates the repetition in each notice. All "Headquarters" addresses are: (Office), U.S. Postal Service, 475 L'Enfant Plaza West SW., Washington, D.C. 20260.

Postal Service Regional Offices

Regional Postmaster General, Central Region, Main P.O. Bldg., Chicago, IL 60699. (States serviced: IL, MI, OH, IN, HY, WI, MN, IA, MO, ND, SD, NE, KS (except 679).)

Regional Postmaster General, Eastern Region, P.O. Box 8601, Philadelphia, PA 19101. (States serviced: VA, WV, MD, DE, PA, DC, and those portions of New York State and New Jersey outside the Greater New York City Metropolitan area.)

Regional Postmaster General, Southern Region, 5100 Popular Ave., Memphis, TN 38166. (States serviced: TN, AL, MS, TX, LA, GA, FL, NC, SC, OK, AR and KS (679).)

Regional Postmaster General, Northeast Region, 1633 Broadway (at 50th Street) New York, NY 10098. (States serviced: New York City, RI, MA, NH, VT, ME, and those portions of New York State, Connecticut, and New Jersey within the New York City Metropolitan

area, also Puerto Rico and Virgin Islands.)

Regional Postmaster General, Western Region, 850 Cherry St., San Bruno, CA 94099. (States serviced: CA, NV, HI, AK, WA, OR, MT, ID, WY, UT, CO, AZ, NM, EL Paso, TX Dist. and Guam.)

Inspection Service

Chief Postal Inspector, U.S. Postal Service, 475 L'Enfant Plaza West SW., Washington, D.C. 20260.

Training Institute

Postal Service Training and Development Institute, 10000 Kentsdale Drive, Potomac, MD 20854.

National Test Administration Center

National Test Administration Center, U.S. Postal Service, Federal Building, Room 2001, 300 North Los Angeles Street, Los Angeles, California 90012.

Bulk Mail Centers

Atlanta, 1805 Bolton Road, NW., Atlanta, GA 30369.

Chicago, 7500 West Roosevelt Road, Building No. 1, Forest Park, IL 60130.

Cincinnati, 3055 Crescentville Road, Cincinnati, OH 45235.

Dallas, P.O. Box 21106, Dallas, TX 75211.

Denver, 7755 East 56th Avenue, Commerce City, CO 80022.

Des Moines, 4000 NW., 109th Street, Des Moines, IA 50395.

Detroit, 17500 Oakwood Boulevard, Allen Park, MI 48101.

Greensboro, 3701 West Wendover Avenue, Greensboro, NC 27495.

Jacksonville, 7415 Commonwealth Avenue, Jacksonville, FL 32099.

Kansas City, 4900 Speaker Road, Kansas City, KS 66106.

Los Angeles, 4701 South Eastern Avenue, Bell, CA 90201.

Memphis, 1921 Elvis Presley Boulevard, Memphis, TN 38136.

Minneapolis-St. Paul, 3165 South Lexington Avenue, St. Paul, MN 55121.

New York, 80 County Road, Jersey City, NJ 07307.

Philadelphia, 1900 Byberry Road, Philadelphia, PA 19116.

Pittsburgh, R.D. No. 2, Wexford, PA 15090.

St. Louis, 5800 Phantom Drive, Hazelwood, MO 63042.

San Francisco, 2501 Rydin Road, Richmond, CA 94850.

Seattle, P.O. Box 5000, Federal Way, WA 98002.

Springfield, 190 Fiberloid Street, Springfield, MA 01151.

Washington, 9201 Edgeworth Drive, Washington, D.C. 20027.

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federal register

Wednesday
January 7, 1981

Part V

Environmental Protection Agency

**State Registration of Pesticides To Meet
Special Local Needs**

**ENVIRONMENTAL PROTECTION
AGENCY****40 CFR Part 162**

[OPP-30003B; PH FRL 1619-2]

**State Registration of Pesticides To
Meet Special Local Needs****AGENCY:** Environmental Protection
Agency (EPA).**ACTION:** Final rule.

SUMMARY: This document establishes final rules for the registration of pesticides by the States to meet special local needs, as authorized by sec. 24(c) and 25(a) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended [FIFRA] (sec. 22 and 23, Pub. L. 95-396, 92 Stat. 819; 7 U.S.C. 136 et seq.). This rule clarifies the scope of the authority granted to the States by the statute, describes registration procedures for States, and establishes procedures for EPA's exercise of its statutory power to disapprove certain State registrations and to suspend State registration authority.

EFFECTIVE DATE: This rule will not take effect before the end of 60 calendar days of continuous session of Congress after the date of publication of this rule. EPA will publish a notice of the actual effective date of this rule. See Supplementary Information for further details.

FOR FURTHER INFORMATION CONTACT: P. H. Gray, Jr., Sec. 24(c) Working Group Leader (TS-770-M), Office of Pesticide Programs, Office of Pesticides and Toxic Substances, Environmental Protection Agency, 1401 M St. SW., Washington, D.C. 20460, 202-472-9400.

SUPPLEMENTARY INFORMATION: These rules will be designated as §§ 162.150 through 162.155, Subpart D, Part 162, Title 40 of the code of Federal Regulations.

These rules were tentatively designated as Subpart B and published as a proposed rule for public comment on August 7, 1979 (44 FR 46414). Subsequent to the publication of the proposed rules, the Section 24(c) Working Group was notified that Subpart B would be designated for future amendments to regulations under section 3 of FIFRA. Accordingly, the final sec. 24(c) regulations will be designated as Subpart D of Part 162.

Subpart D replaces the proposed rules establishing the Interim Section 24(c) Program published on September 3, 1975 (40 FR 40538), as well as the Transitional Section 24(c) Policy statement signed on October 5, 1978, by the Deputy Assistant

Administrator for Pesticide Programs [44 FR 46422 et seq.].

Background

On September 30, 1978, the Federal Pesticide Act of 1978 (Pub. L. 95-396, 92 Stat. 819) amending the Federal Insecticide, Fungicide, and Rodenticide Act, (FIFRA) went into effect. Among the sections of FIFRA which were substantially modified is sec. 24(c) (sec. 2 of Pub. L. 95-396), which authorizes the States to register "additional uses of federally registered pesticides to meet special local needs." The changes made in sec. 24(c) by the Federal Pesticide Act are described in the preamble to the proposed sec. 24(c) regulations published in the *Federal Register* of August 7, 1979 (44 FR 46414).

Comments on the proposed rules were received from approximately 15 sources, including members of the pesticide production industry, pesticide user groups, environmental groups, and several States. These comments are available for public inspection at the Office of the Documents Control Officer, Management Support Division (TS-793), Office of Pesticides and Toxic Substances, Environmental Protection Agency, Rm. E-447, 401 M St., SW, Washington, D.C. 20460.

After consideration of all comments received, EPA has made several, relatively minor, changes in Subpart D. Most of these revisions were made to clarify sec. which apparently were unclear to some readers, or in response to comments made on specific issues discussed in the preamble to the proposed rule. Both the significant relevant comments and the significant changes in the rule are discussed below.

Comments*General*

Comments referred to in this preamble are numbered 1(30003A) through 17(30003A) in EPA's public access file. For the purposes of discussion in this preamble, the comments are referred to as numbers 1 through 15A, corresponding to the official numbering system.

Of the comments received, seven comments [nos. 3, 6, 8, 10, 11, 15, and 15A] were received which were generally, or entirely, supportive of the proposed regulations. These included comments from the Ohio Department of Agriculture, Dow Chemical Co., the Georgia Department of Agriculture and Cooperative Extension Service, and the Virginia and Ohio Farm Bureau Federations.

Four commenters responded to the suggestion contained in the preamble to

the proposed rules that State registrations are limited by sec. 24(c) to products formulated only from manufacturing-use products (technical grade materials) registered under sec. 3 of FIFRA (44 FR 46415). Two commenters (nos. 4 and 5) favored this interpretation of sec. 24(c), while the third commenter (no. 7) opposed it as unnecessary. The fourth commenter (no. 1) favored the idea of a limitation, but suggested that States also be allowed to register products formulated from end-use products registered by EPA.

EPA has concluded that sec. 24(c)(1) was intended to limit State registration of new end-use products to those whose active ingredients are present because of the use of federally-registered products. Accordingly, a new § 162.152(b)(2)(ii) has been added to clarify this limitation.

In effect, this provision will permit States to continue to register new end-use products which are formulated from one or more manufacturing-use or end-use products previously registered by EPA under sec. 3 of FIFRA. Reformulation of a product labeled for end-use, for the purpose of manufacturing a new product, is generally a use not permitted by the original product's labeling. Ordinarily, this would technically be a use inconsistent with the original end-use product's labeling and a violation of sec. 12(a)(2)(G) of FIFRA. However, EPA has determined that such a practice is consistent with the purposes of FIFRA, at this time, and, under sec. 2(ee) of FIFRA, that it is not prohibited by the Act. This practice—registration of reformulated end-use products—is also consistent with EPA's past practice for registration under sec. 3.

Nonetheless, the Agency recognizes that this policy under sec. 3 and sec. 24(c) may cause difficulties in the application of the data requirements for registration under sec. 3 of the Act. For example, in EPA's proposed data guidelines, some data requirements which apply to manufacturing-use products do not apply to end-use products with particular use patterns. In addition, reformulation of end-use products could create opportunities for evasion of the data compensation provisions of sec. 3(c)(1)(D) of the Act.

Accordingly, EPA is now in the process of re-evaluating its policy regarding registration of reformulated end-use products under sec. 3. If EPA concludes that the disadvantages of registering such products outweigh the advantages, then EPA's policy under sec. 3 will be modified accordingly. Thereafter, any reformulation of end-use products, for distribution or sale, not in

conformance with the products' labeling or EPA policy would be a violation of sec. 12(a)(2)(G) of FIFRA, and registration of such a product would not be consistent with the purposes of FIFRA. Therefore, since sec. 24(c)(1) requires State registrations to be issued "in accordance with the purposes of the Act," State registration of end-use products must be carried out consistently with EPA's current and future policy on registration under sec. 3. Section 162.152(b)(2) (ii) of the regulations will be revised to clarify any limitations on State authority when, and if, EPA modifies its policy on reformulation of end-use products.

It should be noted that § 162.152(b)(2)(ii) will effectively bar an applicant for State registration from producing active ingredients for his own use in formulating end-use products, unless he has already obtained a section 3 registration for the ingredient as a manufacturing-use product. In addition, § 162.152(b)(1)(iv) and § 162.152(b)(2)(iii) [§ 162.152(b)(2)(ii) in the proposed rules] expressly prohibit State registration of new manufacturing-use products and of amendments to federally registered manufacturing-use products.

Three commenters commented on proposed § 162.153(h)(4)(i). One commenter (no. 7) stated, incorrectly, that that section authorized EPA to request data used for unreasonable adverse effects determinations from a State for any registration issued under sec. 24(c) of FIFRA. The other commenters (nos. 1 and 8) responded to the question posed in the preamble to the proposed rule (44 FR 46417) on whether § 162.153(h)(4) should be revised to authorize EPA to request data on unreasonable adverse effects in every case where States are required by § 162.153(c) to conduct such a hazard review. Those commenters, including the Wyoming Department of Agriculture, suggested that § 162.153(c) and (h)(4) be made consistent.

In accordance with these comments, and for the reasons set forth in the preamble to the proposed rule, § 162.153(h)(4) has been revised to authorize EPA to request, when appropriate, hazard data from the States in all situations covered by § 162.153(c). This data may be required in such cases to enable EPA to determine if an imminent hazard is created by the registration.

With regard to another question raised in the preamble to the proposed rule on excluding voluntary cancellations from the prohibition in § 162.153(b) against State registrations of cancelled uses, three comments were received. Two commenters (nos. 8 and

14) suggested that all voluntarily cancelled uses should be included in the prohibition.

One commenter (no. 1) favored allowing States to register a use voluntarily cancelled under section 3 if such cancellation was not preceded by a notice of intent to cancel. However, the commenter went on to suggest that in such cases the State must first determine the reason for voluntary cancellation, since a registrant may voluntarily cancel a registration because of health or safety concerns, even though EPA has not issued a notice of intent to cancel.

EPA has considered these issues at length and has decided that section 24(c)(1) was not intended to apply in all cases of voluntarily cancelled registrations, since some registrations may have been cancelled merely for reasons of convenience. However, voluntary cancellations made by a registrant subsequent to a notice of intent to cancel by EPA are in the same general class as cancellations actually made by the Administrator for health and safety reasons. Therefore, such cancellations are covered by sec. 24(c)(1). Accordingly, § 162.152(a)(3) has been revised to specifically include such voluntarily cancelled registrations.

Where no notice of cancellation is involved, the reason for voluntary cancellation may not be apparent. In such cases, EPA may have access to facts that the States do not, and which States should consider before deciding whether to issue a registration under section 24(c). Therefore, § 162.152(b)(1)(ix) and (2)(iv) have been expanded slightly to require States to consult, informally, with EPA before registering any use of a product for which federal registration has been voluntarily cancelled without a prior notice of intent to cancel by the Administrator.

On a related matter, one commenter (no. 4) suggested that § 162.152(b) should also require States to notify EPA prior to registration of any products which are not similar in composition to any pesticide registered under sec. 3. EPA does not feel that such an extension is necessary, given that § 162.153(c)(1)(i) requires States to determine that such a registration will not cause unreasonable adverse effects on man or the environment, and that EPA has authority to request underlying hazard data under § 162.153(1)(4) and to disapprove such registrations, if appropriate, under § 162.154.

Definitions

Several commenters objected that several of the proposed definitions were

intended to make "essentiality" a prerequisite for State registration, contrary to the intent of sec. 24(c)(2). One of these commenters (no. 7) claimed that the definition of "pest problem" under § 162.151(d) would lead to this result—in the case of desiccants, defoliant, and plant regulators—since that definition uses the word "requiring" when describing when such pesticides may be registered to correct a pest problem. EPA does not agree with this commenter's interpretation of the definition, and rejects any suggestion that EPA is trying indirectly to take any action forbidden by sec. 24(c). However, to avoid any confusion with regard to the meaning of the term "pest problem," § 162.151(d)(2) has been revised to state clearly that a pest problem may exist whenever use of a defoliant, desiccant, or plant regulator would be "appropriate."

Similarly, two commenters (nos. 2 and 16) claimed that the definition of "special local need" under § 162.151(i) would make essentiality a criteria for registration, since that section and § 162.153(b) require a State to determine "that an appropriate federally registered pesticide . . . is not sufficiently available" to meet the local need. EPA must also reject this interpretation of § 162.151(i). As the preamble to the proposed regulations stated (44 FR 46415, 46416), § 162.151(i) clearly leaves the States ample discretion to determine whether any pesticide registered under sec. 3 is both "appropriate" and "sufficiently available" to meet the local need. This discretion allows a State to register a pesticide which is not absolutely "essential," if, in the good faith exercise of its authority, the State determines that a federally registered pesticide is either not "appropriate" or is, for some reason, not "sufficiently available." On the other hand, § 162.151(i) leaves any State free to use lack of essentiality as a ground for denying State registration if the State feels that is appropriate. Therefore, the definition of "special local need" represents a reasonable compromise between the need to give States some direction as to how to determine whether a special local need exists, and the need to allow the States to exercise the discretion Congress intended them to have. No change in the definition is required.

Similarly, EPA must reject the suggestion of two commenters (nos. 9 and 15) who believe that § 162.153(b) should not give examples of what a State may consider as not involving a special local need. EPA again points out, as previously stated in the preamble to

the proposed rule (44 FR 46416), that § 162.153(b) leaves the States full discretion as to whether these examples should be used in a given case. EPA does not intend to second-guess the States in such matters but it does expect the States to use their discretion to make reasonable determinations under § 162.153(b), in order to prevent registrants from circumventing the requirements of sec. 3 of FIFRA. For this reason, EPA must reject another commenter's (no. 1) claim that registration in other States is a factor which should never be considered by a State under § 162.153(b). An obvious nationwide pattern of State registrations for a particular use should be considered by a State in determining whether a registrant is evading registration requirements under sec. 3. However, EPA cannot specify a number of States which can be used as a basis for drawing a line between local and national needs, as was requested by one commenter (no. 4). Such decisions must be made on a case-by-case basis.

On the other hand, EPA must reject the suggestion of two commenters (nos. 5 and 8) that the definition of "special local need" is too broad and allows the States too much discretion. As stated earlier, the current definition reflects Congress' intent to broaden State authority under sec. 24(c) and is consistent with the experience of EPA and the States under the original sec. 24(c).

Another commenter (no. 12), however, raised a valid question about the definition. That commenter asked whether economic factors, as well as considerations of quantity, location, transportation difficulties, and similar factors affecting the availability of federally registered pesticides, could be considered in determining that a "federally registered pesticide is not sufficiently available." EPA has considered this issue carefully and has concluded that economic factors may indeed be taken into consideration by a State in deciding whether or not an EPA-registered product is "sufficiently available."

On a similar topic, one commenter (no. 5) stated that the definition of "similar use pattern" under § 162.151(1) was too broad, and that EPA is required to write "standards" to define what is a similar use pattern. Another commenter (no. 13) claimed that the definition should have stated expressly that a change from terrestrial to aquatic applications is not considered a similar use pattern. EPA must reject both comments.

The definition of "similar use pattern" was intended to be broad, in accordance

with the apparent intent of Congress that the term be interpreted in a way which would allow States to issue certain routine registrations free from EPA's disapproved authority in cases where the Agency has already considered the same or similar registrations under sec. 3 (see S. Rep. 95-1188, p. 51). Also, there is no need to write more specific standards to distinguish between similar and non-similar use patterns since § 162.151(h) can be easily applied to all situations likely to arise under sec. 24(c). Finally, it should be noted that changes from aquatic to terrestrial applications, and vice versa, are "changed used patterns," as defined by 40 CFR 162.3(k), and are therefore expressly excluded from § 162.151(h), since § 162.3 is incorporated by reference in § 162.151.

Finally, another comment (no. 7) on the definition section of the proposed rule requested clarification of the definition of "federally registered," § 162.151(a). Specifically, the commenter asked if pesticides registered by a State prior to August 4, 1975, as described in EPA's Pesticide Enforcement Policy Statement No. 3, are considered "federally registered." Such registrations are not covered by § 162.151(a) since they were not registered by the Administrator of EPA, nor by the Secretary of Agriculture, and since such registrations are specifically excluded from the applicability of this rule by § 162.150(b).

The same commenter also asked whether a valid registration under sec. 24(c) sustains itself under the provisions of FIFRA. As stated in the preamble to the proposed rule (44 FR 46418), valid registrations under sec. 24(c) are subject to all provisions of FIFRA which come into effect after issuance of a registration, including provisions for continuing a federal registration.

State Registration Authority

Two commenters (nos. 4 and 16) objected generally that these rules would expand State registration authority beyond that granted by the original version of sec. 24(c), contrary to the intent of Congress. EPA must reject these comments for the reasons stated in the preamble to the proposed rule (44 FR 46414).

Another commenter (no. 5) stated specifically that sec. 24(c) does not authorize States to register new pesticide products, as provided by proposed § 162.152(b)(2). The commenter cited that absence of language in sec. 24(c) expressly authorizing such registrations, as well as certain portions of the Senate Committee on Agriculture, Nutrition, and Forestry Report on the

Federal Pesticide Act of 1978, pp. 81, 169 (January 1979) which the commenter believes support its interpretation.

EPA has considered these points at length. In fact, similar arguments were exhaustively examined by EPA prior to the drafting of the proposed rule. However, it was concluded that, although the express language of sec. 24(c) could be interpreted as the commenter suggested, such an interpretation "would be inconsistent with Congress' general intent to broaden State registration authority * * *" (see preamble, 44 FR 46415), since such an interpretation would, in fact, remove authority which States clearly possessed under the original sec. 24(c). It is extremely unlikely that Congress intended such a result.

It should also be noted that, although the legislative history cited by the commenter tends to support the commenter's opinion, other, equally valid, examples of the legislative history of sec. 24(c) support EPA's interpretation (see, e.g., H.R. Rep. 95-1188, pp. 50-51, (September 12, 1978)). Therefore, that portion of the commenter's argument is not sufficiently persuasive.

In addition, EPA would point out that only one response was received on this issue, even though the preamble to the proposed rule clearly invited comment on EPA's interpretation. Therefore, this commenter apparently stands alone in objecting to § 162.152(b)(2), even though other members of the pesticide manufacturing industry might benefit economically if the commenter's suggestion were adopted by EPA.

Therefore, since the language of sec. 24(c) is subject to the interpretation given it in the proposed rules, since that interpretation is consistent with Congress' general intent, and since the legislative history of the section is not conclusive, EPA must reject this comment.

On a similar matter, another commenter (No. 16) stated his opinion that sec. 24(b) of FIFRA prohibits States from issuing registrations under sec. 24(c) for a pesticide use already registered under sec. 3, contrary to proposed § 162.152(c)(2). EPA rejects this comment on the grounds that it is based on an erroneous interpretation of sec. 24(b). That section merely prohibits States requiring changes in the labeling or packaging of products registered under sec. 3. It does not prohibit State registration of the use itself under sec. 24(c), even though the State registration may require the addition of supplemental labeling to the product. Such supplemental labeling is necessary to implement sec. 24(c), and its use is therefore "required under [the] * * *

Act" and is authorized by sec. 24(b). Those sections must be read consistently, and not in such a way as to negate each other.

With regard to limitations on State authority, one commenter (No. 5) suggested that the requirement in § 162.152(a)(2), as explained in the preamble to the proposed rule (44 FR 46415), for tolerances and clearances for food or feed uses should not apply to inert ingredients, by-products, and metabolites. The commenter claimed that such a requirement would be inconsistent with Agency policy with regard to registrations under sec. 3 of FIFRA. EPA must reject this comment since the requirement is, in fact, consistent with current Agency policy for federal registrations (e.g., 40 CFR Part 180). Although EPA does not always publish tolerances or other clearances for inerts, metabolites, and by-products, it always satisfies itself that nontoxicological problems will be caused by such compounds before registering a product. EPA believes that this policy, together with sec. 24(c)(3)'s express prohibition against State registration of pesticides for food or feed use without tolerances or exemptions under the FFDCA, justifies the limitation found in § 162.152(a)(2).

Another commenter (No. 4) criticized proposed § 162.152 (b) and (c), which permits State registration of uses of products for which other uses of the same product have been cancelled by EPA. The commenter implied that the States should not be allowed to register such uses, and that authority to do so would lead to State registration of many new uses of products like DDT over which EPA would have little or no control. This commenter has apparently overlooked the statement in the preamble to the proposed rule (44 FR 46415) which explained that the provisions in question were written to be consistent with the express language of sec. 24(c)(1). In addition, the commenter has overlooked the fact that § 162.152 (b) and (c) require States to consult with EPA prior to registering such uses. This prior consultation will allow EPA to discuss controversial applications with a State, and, where necessary, provide EPA with an opportunity to dissuade the State from issuing a potentially hazardous registration. In those cases where the State nevertheless issues a registration, EPA will at least have had sufficient prior notice of the State action to take whatever steps might be necessary and appropriate to prevent unreasonable adverse effects from occurring.

State Registration Procedures

One commenter (No. 4) requested that it be given direct notification of any sec. 24(c) registration issued for a use of a pesticide for which other uses of the same pesticide were cancelled after hearings in which the commenter had participated. EPA must reject this request for special notification since it would impose an unreasonable and unnecessary burden upon the Agency or the States. Since notice of all sec. 24(c) registrations will be regularly published in the *Federal Register* under § 162.153(i), the commenter, and other persons, will have adequate notification of registrations in which they have an interest.

Two commenters (Nos. 6 and 9) suggested that proposed § 162.153(h)(2) should be amended to allow States more than 45 days after issuance of a registration in which to send EPA a copy of final printed labeling for that registration. Both commenters stated that, in general, States cannot obtain copies of final printed labeling in time to comply with the 45 day limit. This accords with other comments received by EPA during the drafting of the proposed rule. EPA has therefore decided that, as suggested by some commenters, 60 days is a more reasonable time limit for submission of such labeling. Section 162.153(h)(2) has been amended accordingly.

One commenter (No. 18) criticized proposed § 162.153(d), which requires States to perform efficacy reviews only when registering public health uses, on the grounds that the requirement imposes an unfair burden on such registrants. EPA strongly disagrees with this comment. Although § 162.153(d) does place a burden on registrants of public health uses, the necessity of ensuring the efficacy of pesticides registered for such uses is clear and well-established. Lack of efficacy could have a direct and serious adverse impact on the health of persons who rely on such products for control of disease-causing pests. This is generally not the case for registration of other (e.g., agricultural) uses. Moreover, as stated in the preamble to the proposed rule, the efficacy review provision is consistent with EPA's general policy for registrations issued under sec. 3 of FIFRA (e.g., 40 CFR 162.182(b)(2)(i)).

One commenter (No. 9) objected generally to the proposed section on State registration procedures under § 162.152 on the grounds that they are not expressly authorized by FIFRA. The commenter suggested that State registration procedures be described in voluntary "guidelines" instead. EPA

rejects this broad criticism since, for reasons stated in the preamble to the proposed rule (44 FR 46416), it is necessary to the implementation of EPA's duties under sec. 24(c) for all States to observe certain minimal uniform procedures. Only in this way can EPA be assured that States are exercising their authority in accordance with the limitations of sec. 24(c), and only by this type of regulation can EPA obtain the data needed to make reasonable decisions, when appropriate, on whether to disapprove State registrations or to suspend State authority. Therefore, such regulations are implicitly authorized by sec. 24(c) and sec. 25(a) of FIFRA.

Another commenter (No. 7) suggested that data required to be submitted to States by registrants under § 162.153 should be considered as "protected under FIFRA sec. 3(c)(1)(D) with respect to future use in support of registrations under sec. 3 of FIFRA." EPA cannot agree with this interpretation. The data protection provisions of sec. 3(c) specifically apply only to data submitted to the Administrator of EPA. Neither sec. 3(c)(1)(D) nor sec. 10, "Protection of Trade Secrets," was intended to apply to data held only by the States under sec. 24(c). As stated in the preamble to the proposed rules (44 FR 46416), valid registrations issued under sec. 24(c) are considered "registrations under sec. 3." However, the procedures leading up to registration by the State are not covered by the procedural requirements for issuance of registrations under sec. 3. This includes requirements under FIFRA for data use protection and compensation.

On another matter, one commenter (No. 16) objected to proposed § 162.153(d)(4) (now § 162.153(e)(5)) on the grounds that States are not authorized to classify pesticides for restricted use under FIFRA. This commenter has apparently misunderstood the clear intent and meaning of § 162.153(e)(5). That section does not allow States to classify pesticides for restricted use under FIFRA. It merely recognizes that many States have authority to classify pesticides under State law, and that it is possible that special conditions in a State may warrant a restriction of a pesticide use which is not restricted by EPA. States have always been free to impose such additional restrictions on pesticide use within their jurisdictions under sec. 24(a) of FIFRA, provided that they do not violate sec. 24(b) by altering the approved federal labeling or packaging in any way not specifically authorized by EPA. The agency has long

recognized and sanctioned such action by States, and § 162.153(e)(5) merely confirms this fact and lays down certain procedures which will ensure that States do not violate sec. 24(b) in exercising their authority. Of course, such an additional restriction under State law is enforceable only under State law, not under FIFRA sec. 3(d).

On a related topic, another commenter (No. 7) asked for clarification of a statement in the preamble to the proposed rule (44 FR 46417) to the effect that classification of a pesticide for restricted use by EPA will "automatically apply to all registrations previously issued under sec. 24(c) for that pesticide." As the commenter correctly observed, the preamble should have read that restriction of a use by EPA "will automatically apply to all registrations under sec. 24(c) for that use of the pesticide."

The same commenter also argued that proposed § 162.153(e)(3)(viii) was wrong in requiring that State supplemental labeling prohibit use of a pesticide inconsistent with EPA-approved labeling. The commenter claimed that this would largely negate the effect of sec. 24(c), since State supplemental labeling often authorizes uses inconsistent with the federal labeling. EPA disagrees with this assessment.

EPA recognizes that State supplemental labeling frequently authorizes uses not specifically authorized by EPA-approved labeling. That is consistent with the purpose of sec. 24(c). However, such additional uses also must be, and generally are, consistent with the federal labeling under the terms of FIFRA sec. 2(ee). That section allows many uses not found on the federal labeling, as long as the new use is not prohibited by the EPA labeling and is otherwise in conformance with sec. 24 and regulations thereunder. Therefore, State supplemental labeling can, and must, be written in such a way as to conform with approved federal labeling, as required by proposed § 162.153(e)(3)(viii). Readers should note, however, that proposed § 162.153(e)(3)(viii) has been combined with § 162.153(e)(3)(vii) in the final rule to eliminate some redundancy.

The same commenter also suggested that § 162.153(e) be expanded to provide additional guidance to States on supplemental labeling requirements in cases where a State registers an unclassified use of a pesticide for which other uses have been classified as restricted by EPA. EPA does not believe that such additional guidance is required since § 162.153(e)(3) already

gives sufficient instruction as to the minimum required contents of any supplemental labeling. In any event, in many of the cases described by the commenter, the State will be required to classify the use registered under sec. 24(c) as restricted under § 162.153(g). In those instances where the State need not classify the use as restricted, it is free to indicate that fact on the supplemental labeling.

However, the Agency has, on its own initiative, slightly modified § 162.153(e)(3), and added a new § 162.153(e)(4), to clarify when State approved labeling must be made available to purchasers and users of pesticides registered under sec. 24(c), and to emphasize that the States have the primary responsibility for ensuring compliance with this requirement.

Commenter no. 7 also suggested that EPA publish a summary of all prior State registration actions in the first notice published under § 162.153(i). EPA has already compiled such a listing and has made it available to the States and to the public on microfiche.

Disapproval of State Registrations

One commenter (no. 7) suggested that § 162.153(c) be amended by changing the disapproval period for State registrations, for which EPA was not timely notified, from 90 days to 80 days from the time that EPA actually received notification of the registration. This suggestion was based on the commenter's belief that a disapproved registration remains in effect until the disapproval period is over, even though it may actually have been disapproved before the end of the disapproval period. The commenter was concerned that disapproved registrations should not remain effective longer than absolutely necessary. EPA shares this concern but does not agree with the commenter's suggestion, since it is based on an erroneous interpretation of sec. 24(c)(2). Disapprovals by EPA under that section are effective immediately, as § 162.154(c) clearly implies, unless the notice of disapproval indicates otherwise. This is the most reasonable interpretation of the statutory language. It is extremely unlikely that Congress intended that a State registration should be considered valid—and the pesticide to be lawfully distributed and used—after it has been disapproved on health, environmental, or other substantial grounds. Nothing in the legislative history of the section supports any interpretation other than EPA's. However, to avoid confusion on this subject, § 162.154(c) has been slightly amended to clarify this point.

Two commenters (nos. 7 and 12) also suggested that § 162.154(c) be amended to require the Administrator to include instructions on use or disposal of existing stocks of disapproved pesticides whenever appropriate. EPA agrees that such a change is reasonable and § 162.154(c) has been amended accordingly.

Finally, the U.S. Department of the Interior in its comments (no. 13) suggested that EPA consult the Fish and Wildlife Service whenever making a determination under § 162.154(a)(1)(i) on the possible creation of unreasonable adverse effects on the environment. Although EPA must retain sole responsibility for making such decisions under § 162.154, the Agency intends to consult with other Agencies whenever appropriate to obtain expert advice on matters with which the other Agencies are concerned.

Suspension of State Authority

One commenter (no. 16) suggested that § 162.155(b)(2) and (c)(3) be amended to require the Administrator to suspend a State's authority whenever a State commits any of the acts described therein. EPA rejects this suggestion since it would deprive the Administrator of the discretion, expressly granted by sec. 24(c)(4), which is needed in order to negotiate reasonable solutions with States in cases where suspension of State authority is not necessary.

Similarly, EPA must partially reject another commenter's (no. 8) claim that § 162.155(b)(2) allows the Administrator too much discretion in that it authorizes suspension for a State's refusal to correct "other deficiencies in its program specified by the Administrator." This authority is consistent with sec. 24(c)(4) and is necessary to ensure that State programs are implemented in accordance with sec. 24(c). However, EPA agrees that the term "other deficiencies" is somewhat broad and § 162.155(b)(2) has therefore been revised to limit the Administrator's power to cases of "significant deficiencies" in the State program.

Finally, the same commenter also suggested that § 162.155 be amended to specify the administrative or judicial remedies which are available to a State subject to a suspension of its authority. EPA agrees with this request and § 162.155 has been modified to specify that remedies are available under sec. 16 of FIFRA and the Administrative Procedure Act.

In addition, § 162.155(c) has been revised to clarify the procedures by which final decisions on suspension will be made, including procedures for administrative hearings and appeals.

Miscellaneous

One commenter (no. 7) requested that the rules be revised to state expressly that sec. 24(c) registrants must comply with State law as well as all applicable federal laws and regulations. EPA does not believe such an amendment is required since it is clear that all State laws and regulations which are not in conflict with FIFRA, or rules thereunder, must be obeyed by those under the jurisdiction of the State.

Another commenter (no. 8) objected to the statement in the preamble to the proposed rule (44 FR 46417) that disapprovals by EPA of registrations under sec. 24(c) are not the same as denial, suspension, or cancellation of registrations under sec. 3 and 6 of FIFRA. The commenter argued that disapprovals are equivalent to such actions, and that State registrants subject to disapproval are entitled to remedies under sec. 3, 6 and 15 of FIFRA. EPA rejects this argument absolutely since the language of sec. 24(c) itself clearly distinguishes between disapprovals and other actions taken under FIFRA and establishes procedures for disapproval different from procedures established for sec. 3 and 6. Nor is there any indication in either sec. 3 or 6, or their legislative history, that disapproval of State registrations is to be covered by the procedures established expressly for denial, suspension, and cancellation of registrations.

Two commenters (nos. 5 and 9) objected that proposed § 162.156(a)(3), stating that registrations not issued in accordance with § 162.156(a) and (b) are invalid, was unauthorized under sec. 24(c). EPA strongly disagrees with this interpretation for the reasons stated in the preamble to the proposed rule (44 FR 46418). Even though sec. 24(c) does not expressly refer to invalidation of State registrations, it does specifically lay down several important prerequisites to the issuance of registrations by a State under that section. § 162.156(a) and (b) restate and clarify those conditions. A State registration which does not meet all of those prerequisites clearly cannot be considered valid under sec. 24(c). It would be unreasonable, for example, to conclude that a registration issued by a State for a pesticide use previously cancelled by EPA should be considered valid even though sec. 24(c)(1) expressly prohibits such registrations. The unreasonableness of considering such potentially hazardous unauthorized registrations as valid until disapproved is further demonstrated by the fact that EPA's authority to disapprove State registrations is relatively limited.

Therefore, § 162.156(a)(3) is a necessary, proper, and authorized way to prevent pesticides which are registered in flagrant violation of sec. 24(c)(1), but which are beyond EPA's disapproval authority, from entering into public use. However, EPA does recognize that proposed § 162.156(a)(3) was somewhat overbroad in that it incorporated as grounds for invalidation all of § 162.152(b), even though some provisions of the latter section were not limitations on State authority created by sec. 24(c). Accordingly, § 162.156(a)(3) has been revised to incorporate by reference only those parts of § 162.152(b) derived from the limitations found in sec. 24(c).

On the same topic, another commenter (no. 6), implicitly conceding the legitimacy of § 162.152(a)(3), suggested that a 90 day limit be placed on the Administrator's authority to issue notices of invalidity. EPA must also reject this suggestion, which was apparently based on the fact that there is a 90 day limit on EPA's disapproval authority. As explained above, invalidation and disapproval are of entirely different natures. The procedural restraints expressly imposed on disapproval actions by sec. 24(c) are not, and should not be, imposed on notices of invalidation which merely point out that a particular registration is void, from the moment it was issued, under the direct operation of sec. 24(c) itself. However, pursuant to another commenter's request (no. 16), § 162.156(a)(3) has been slightly modified to require the Administrator to notify the registering State whenever he discovers that a State registration is invalid.

Finally, one commenter (no. 2) suggested that the five year limit for completion of a regulatory review under sec. 2(d)(8) of Executive Order 12044, proposed for this rule (44 FR 46418), be shortened to two and one-half years. EPA must reject this suggestion. The five year review period is standard for this type of regulation, while the period proposed by the commenter is too short to permit an accurate evaluation of the effectiveness of this rule. However, it should be noted that the regulation is subject to amendment at any time if a need for such action can be shown. The commenter and other interested persons, are, of course, free to bring such a need to EPA's attention whenever it arises.

Several other comments were received which were either irrelevant or clearly erroneous in content, or which were too minor to warrant discussion in this preamble.

Conclusion

As the preceding discussion shows, relatively few changes in the proposed regulations were necessary. Those changes are either minor or made pursuant to specific proposals on which public comment was invited in the preamble to the proposed rule. Therefore, this regulation does not require reproposal under 5 U.S.C. 553(b).

Regulatory Analysis

EPA has determined that this rule does not require a Regulatory Analysis under Executive Order 12044. A screening study to this effect is available for review.

Statutory Review

The U.S. Department of Agriculture has reviewed this regulation in accordance with section 25(a) of FIFRA and has concurred with only one minor comment in its publication in the *Federal Register*. That comment involved clarification of § 162.152(a)(2) and the comment has been incorporated in this final rule.

The regulation was also submitted for scientific review and comment to the FIFRA Scientific Advisory Panel (SAP) in accordance with section 25(d) of FIFRA. In a letter dated August 20, 1980 to the EPA Deputy Assistant Administrator for Pesticide Programs, the SAP concurred without comment in the proposed regulation.

Regulatory Review

Section 2(d)(8) of Executive Order 12044 requires that a plan for evaluating the regulation after its issuance be developed. The Agency's plan for evaluation of this rule calls for an analysis by EPA of the regulation and its effect on State regulatory agencies and registrants, in cooperation with the State-FIFRA Issues Research and Evaluation Group.

This evaluation will be performed within five years from the date of promulgation of this rule, and a determination will then be made as to whether modification of the rule is necessary.

Effective Date: On December 17, 1980, President Carter signed the Federal Insecticide, Fungicide, and Rodenticide Act Extension bill (Pub. L. 96-539). This bill amended several sections of FIFRA, including sec. 25 on rulemaking. Section 4 of the Extension Act adds a new paragraph, sec. 25(e), to FIFRA which requires EPA to submit final regulations to Congress for review before the regulation becomes effective. Copies of this rule have been transmitted to

appropriate offices in both Houses of Congress.

(FIFRA 24(c); 7 USC 136v)

Dated: December 24, 1980.

Douglas M. Costle,
Administrator.

Pursuant to sec. 4 of the 1980 FIFRA Extension Act, and in accordance with President Carter's statement on signing the bill (Weekly Compilation of Presidential Documents, p. 2814, December 22, 1980), this rule will not take effect before the end of 60 calendar days of continuous session of Congress after the date of publication of this rule. Since the actual length of this waiting period may be affected by Congressional action, it is not possible, at this time, to specify a date on which this regulation will become effective. Therefore, EPA at the appropriate time, will publish a notice in the Federal Register, announcing the end of this "report and wait" period and notifying the public of the actual effective date of this regulation.

40 CFR Part 162 is amended by reserving Subparts B and C and establishing Subpart D, to read as follows:

PART 162—REGULATIONS FOR THE ENFORCEMENT OF THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

Subparts B-C—[Reserved]

Subpart D—Regulations Pertaining to State Registration of Pesticides To Meet Special Local Needs

Sec.

- 162.150 General.
- 162.151 Definitions.
- 162.152 State registration authority.
- 162.153 State registration procedures.
- 162.154 Disapproval of State registrations.
- 162.155 Suspension of State registration authority.
- 162.156 General requirements.

Authority. Sec. 24(c) and 25(a) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (FIFRA or the Act (secs. 22 and 23, Pub. L. 95-390, 92 Stat. 819; 7 U.S.C. 136 et seq.))

Subparts B-C—[Reserved]

Subpart D—Regulations Pertaining to State Registration of Pesticides To Meet Special Local Needs

§ 162.150 General.

(a) *Scope.* This subpart sets forth regulations governing the registration by any State of pesticide products, or uses thereof, formulated for distribution and use within the State to meet special local needs under sec. 24(c) of the Act. It

also sets forth regulations governing the exercise by the Administrator of the power to disapprove specific State registrations and to suspend a State's registration authority under sec. 24(c). Unless otherwise indicated, any reference herein to registrations issued by a State includes amendments of registrations issued by States.

(b) *Applicability.* This subpart applies only to State registration authority granted by sec. 24(c) of FIFRA. It does not apply to any authority granted, or procedures established, by State law with respect to registration, licensing, or approval required for use within the State of federally registered pesticide products. In addition, this subpart does not apply to products or uses registered by a State prior to August 4, 1975, and which have continued in intrastate commerce in accordance with § 162.17, unless those products were subsequently registered by the State under sec. 24(c).

§ 162.151 Definitions.

Unless otherwise indicated, terms used in this subpart have the meanings set forth in FIFRA and in Subpart A of this part. In addition, as used in this subpart, the following terms have the meanings set forth below: (a) "Federally registered" means currently registered under sec. 3 of the Act, after having been initially registered under the Federal Insecticide, Fungicide, and Rodenticide Act of 1947 (Pub. L. 80-139; 73 Stat. 286; June 25, 1947) by the Secretary of Agriculture or under FIFRA by the Administrator.

(b) "Manufacturing-use product" means any pesticide product other than a product to be labeled with directions for end use. This term includes any product intended for use as a pesticide after re-formulation or repackaging.

(c) "New product" means a pesticide product which is not a federally registered product.

(d) "Pest problem" means (1) a pest infestation and its consequences, or (2) any condition for which the use of plant regulators, defoliants, or desiccants would be appropriate.

(e) "Product" or "pesticide product" means a pesticide offered for distribution and use, and includes any labeled container and any supplemental labeling.

(f) "Similar composition" refers to a pesticide product which contains only the same active ingredient(s), or combination of active ingredients, and which is in the same category of toxicity, as a federally registered pesticide product.

(g) "Similar product" means a pesticide product which, when

compared to a federally registered product, has a similar composition and a similar use pattern.

(h) "Similar use pattern" refers to a use of a pesticide product which, when compared to a federally registered use of a product with a similar composition, does not require a change in precautionary labeling under § 162.10(h), and which is substantially the same as the federally registered use. Registrations involving changed use patterns are not included in this term.

(i) "Special local need" means an existing or imminent pest problem within a State for which the State lead agency, based upon satisfactory supporting information, has determined that an appropriate federally registered pesticide product is not sufficiently available.

(j) "State" or "State lead agency" as used in this subpart means the State agency designated by the State to be responsible for registering pesticides to meet special local needs under sec. 24(c) of the Act.

§ 162.152 State registration authority.

(a) *Statutory limitations.* In accordance with sec. 24(c) of the Act, each State is authorized to register a new end use product for any use, or an additional use of a federally registered pesticide product, if the following conditions exist: (1) There is a special local need for the use within the State; (2) The use is covered by necessary tolerances, exemptions or other clearances under the Federal Food, Drug and Cosmetic Act (21 U.S.C. 346 et seq.), if the use is a food or feed use;

(3) Registration for the same use has not previously been denied, disapproved, suspended or cancelled by the Administrator, or voluntarily cancelled by the registrant subsequent to issuance by the Administrator of a notice of intent to cancel that registration, because of health or environmental concerns about an ingredient contained in the pesticide product, unless such denial, disapproval, suspension or cancellation has been superseded by subsequent action of the Administrator; and

(4) The registration is in accord with the purposes of FIFRA.

(b) *Types of registrations—(1) Amendments to federal registrations.*

(i) Subject to the provisions of paragraphs (a) and (b)(1)(ii)(iv) of this section, States may register any new use of a federally registered pesticide product.

(ii) A State may register any use of a federally registered product for which registration of other uses of the product was denied, disapproved, suspended, or

cancelled by the Administrator, provided that the State may register a use not considered by the Administrator in reaching such a determination only after the State consults with appropriate EPA personnel.

(iii) Except as provided in paragraph (a)(3) of this section, a State may register any use of a federally registered product for which registration of some or all uses has been voluntarily cancelled by the registrant, provided that a State may register such a use only after the State has consulted with appropriate EPA personnel.

(iv) A State may not register an amendment to a federally registered manufacturing-use product.

(2) *New products.* (i) Subject to the provisions of paragraph (a) and subparagraphs (b)(2)(ii) and (iii) of this section, a State may issue registrations to meet special local needs for the following types of new end-use products: (A) A product which is identical in composition to a federally registered product, but which has differences in packaging, or in the identity of the formulator.

(B) A product which contains the same active and inert ingredients as a federally registered product, but in different percentages.

(C) Subject to the requirements of paragraph (b)(2)(ii) of this section, a product containing a new combination of active, or active and inert, ingredients.

(ii) A State may register a new product only if each of the active ingredients in the new product is present because of the use of one or more federally registered products and if each of the inert ingredients in the new product is contained in a federally registered product.

(iii) A State may not register a new manufacturing-use product.

(iv) A State may register any use of a new product containing an ingredient described in paragraph (a)(3) of this section, if the new product registration is for a formulation or a use not included in the denial, disapproval, suspension, or cancellation, or if the federally registered use was voluntarily cancelled without a prior notice of intent to cancel by the Administrator. However, a formulation or use of such a new product which was not considered by the Administrator during such proceedings, or which was not the subject of a notice of intent to cancel, may be registered by a State only after the State consults with appropriate EPA personnel regarding the registration application.

(c) *Effect of State registration.* (1) A State registration issued under FIFRA

sec. 24(c) which meets the conditions described in paragraphs (a) and (b) of this section, and which is not disapproved by the Administrator under § 162.154, shall be considered a federal registration, but shall authorize distribution and use only within that State. Accordingly, such registrations are subject to all provisions of FIFRA which apply to currently registered products, including provisions for cancellation and suspension of registrations, and reregistration of products.

(2) A State may require, as a condition of distribution or use of a pesticide product within the State, that the pesticide product be registered under State law as well as under FIFRA. Neither FIFRA sec. 24(c) nor §§ 162.150-162.156 affects a State's right under its own law to revoke, suspend, cancel, or otherwise affect such a registration issued under State law. However, the federal registration, whether issued under FIFRA sec. 3 or 24(c), is not affected by such a State action.

§ 162.153 State registration procedures.

(a) *Application for registration.* States shall require all applicants for registration to submit the following information: (1) Name and address of the applicant and any other person whose name will appear on the labeling or in the directions for use.

(2) The name of the pesticide product, and, if the application is for an amendment to a federally registered product, the EPA registration number of that product.

(3) A copy of proposed labeling, including all claims made for the product as well as directions for its use to meet the special local need, consisting of: (i) For a new product, a copy of the complete proposed labeling; or,

(ii) For an additional use of a federally registered product, a copy of proposed supplemental labeling and a copy of the labeling for the federally registered product.

(4) The complete formula of the product, if the application is for a new product registration.

(5) Any other information which is required to be reviewed prior to registration under this section.

(b) *Special local need determination.* In reviewing any application for registration, the State shall determine whether there is a special local need for the registration. Situations which a State may consider as not involving a special local need may include, but are not limited to, applications for registrations to control a pest problem present on a nationwide basis, or for use of a

pesticide product registered by other States on an interregional or nationwide basis.

(c) *Unreasonable adverse effects determination.* (1) Prior to issuing a registration in the following cases, the State shall determine that use of the product for which registration is sought will not cause unreasonable adverse effects on man or the environment, when used in accordance with labeling directions or widespread and commonly recognized practices: (i) For use of a product which has a composition not similar to any federally registered product.

(ii) For use of a project involving a use pattern not similar to any federally registered use of the same product or of a product with a similar composition.

(iii) For use of a product for which other uses of the same product, or of a product with a similar composition, have had registration denied, disapproved, suspended, or cancelled by the Administrator.

(2) Determinations required by paragraph (c)(1) of this section shall be based on data and criteria consistent with those sections of subpart A of this part, and of Part 163 of this chapter, applicable to the type of product or use under consideration. Such determinations may also involve consideration of the effect of the anticipated classification of the product or use under § 162.153(h).

(d) *Efficacy determination.* Prior to registration of any use of a product for public health purposes—that is, a use which could result in substantial harm to the public health if the product does not perform its intended function, the State shall determine that the product warrants the claims made for it in the registration application. Such determinations shall be based on criteria specified in applicable sections of subpart A and of Part 163 and on any additional criteria established by the State.

(e) *Labeling requirements.* (1) Prior to issuing any registration, the State shall review the proposed labeling submitted with the application to determine compliance with this paragraph. In addition, the State shall review a copy of the final printed labeling as soon as practical after a registration is issued in order to verify compliance with this paragraph.

(2) For a new product, the State must, as a condition of the registration, require that the product be accompanied from the time it enters the stream of commerce by labeling meeting all applicable criteria of § 162.10. New product labeling must all contain: (i) A

statement identifying the State where registration is to be valid.

(ii) The special local need registration number assigned by the State.

(3) Except as provided in paragraph (e)(4) of this section, as a condition for a registration of an additional use of a federally registered product, the State must require that at the time of sale to users, labeling from the federally registered product be accompanied by supplemental labeling which contains:

(i) A statement identifying the State where registration is valid.

(ii) Directions for use to meet the special local need which satisfy the criteria of § 162.10(i).

(iii) The trade name of the product.

(iv) The name and address of the section 24(c) registrant.

(v) The EPA registration number of the federally registered product.

(vi) The special local need registration number assigned by the State.

(vii) A statement prohibiting use of the product in a manner inconsistent with all applicable directions, restrictions, and precautions found in the labeling of the federally registered product and accompanying supplemental labeling.

(4) When a federally registered product is already in the stream of commerce at the time the State issues a registration for an additional use of that product, the State must ensure that supplemental labeling for the additional use, meeting the criteria of paragraph (e)(3) of this section, is made available to purchasers and users of the product within 45 days of the date on which the State approves the final printed supplemental labeling.

(5) If a State classifies for restricted use a product or use registered by the State, which is not required to be so classified by paragraph (g) of this section, then the State may require supplemental labeling for the product or use containing additional appropriate precautions, and a statement that the product or use is for restricted use within that State.

(f) *Packaging and coloration standards.* All products registered by a State must meet all appropriate packaging standards prescribed by the Administrator under sec. 25(c)(3) of FIFRA. State registered products must also meet all appropriate standards for coloration, or discoloration, established by regulation under sec. 25(c) of FIFRA, including the standards contained in § 162.13. Prior to issuing any registration, the State shall determine that the product will conform to these requirements.

(g) *Classification.* (1) As part of the registration of any product or use, a

State shall classify the product or use as a restricted use pesticide if: (i) The product is identical or similar in composition to a federally registered product: (A) For which all federally registered uses have been classified as restricted by the Administrator; or

(B) For which a use similar to the State registered use has been classified as restricted by the Administrator; or

(ii) The State registered product or use meets the criteria for classification as a restricted use pesticide under the applicable provisions of § 162.11(c) (1) through (4).

(h) *Notification and Submission of Data.* (1) Within ten working days from the date a State issues, amends, or revokes a registration, the State shall notify EPA, in writing, of the action. Notification of State registrations, or amendments thereto, shall include the effective date of the registration or amendment, a confidential statement of the formula of any new product, and a copy of the draft labeling reviewed and approved by the State, provided that labeling previously approved by the Administrator as part of a federal registration need not be submitted.

(2) Notification of State registrations or amendments shall be supplemented by the State sending to EPA a copy of the final printed labeling approved by the State within 60 days after the effective date of the registration or amendment.

(3) Notification of revocation of a registration by a State shall indicate the effective date of revocation, and shall state the reasons for revocation.

(4) The Administrator or his designee may request, when appropriate, that a State submit to EPA any data used by the State to determine that unreasonable adverse effects will not be caused when the State registers any use described in paragraph (c)(1) of this section. Within 15 working days of receipt of such a request from EPA, the State shall submit two copies of the requested data.

(i) *Federal Register Publication.* The Administrator shall publish in the *Federal Register*, on a regular basis, a summary of all State registrations made under sec. 24(c) during a previous reporting period established by the Administrator. For each product or use registered, the notice shall indicate:

(1) The name of the product.

(2) The name of the registrant.

(3) The registered use(s) of the product.

(4) The effective date of the State registration.

(5) If the registration is for an additional use of a federally registered product, whether the State registration involves a changed use pattern.

§ 162.154 Disapproval of State registrations.

(a) *General disapprovals.* (1) Except as provided in paragraph (b) of this section, the Administrator may disapprove, on any reasonable grounds, any state registration which, when compared to a federally registered product, does not have both a similar composition and a similar use pattern; provided that the Administrator may not disapprove such a registration solely because of a lack of essentiality. Grounds for disapproval of State registrations not involving similar products may include, but are not limited to: (i) Probable creation of unreasonable adverse effects on man or the environment by the registered use.

(ii) Refusal of the registering State to submit information supporting the registration as required by § 162.153(h).

(iii) Failure of information submitted by the State to support the State's decision to issue the registration under standards established by § 162.153.

(2) Prior to disapproval of any State registration under this paragraph, the Administrator shall notify the registering State, in writing, of the Administrator's intent to disapprove, and of the reasons for disapproval. The notice of intent will provide a reasonable time, not less than ten days from the date the notice is received by the State, for the State to respond, and will invite the State to consult with the Administrator or his designee. If the grounds for disapproval are based on actions or omissions by the State, the notice will, if possible, also provide the State with a reasonable amount of time in which to take corrective action, not to exceed the time allowed for disapproval under paragraph (c) of this section.

(3) The registering State may, within ten days of receipt of a notice of intent to disapprove, request that the Administrator, or his designee, consult with appropriate State officials prior to the Administrator's final decision on disapproval. The Administrator will consider any relevant information presented at such a consultation, or in any other timely and appropriate fashion, in deciding whether to withdraw the notice of intent to disapprove.

(b) *Special disapprovals.* (1) The Administrator may disapprove any State registration, including a registration for a similar product, at any time, if the Administrator determines that use of the product under the State registration: (i) Would constitute an imminent hazard.

(ii) May result in a residue on food or feed exceeding, or not covered by, a tolerance, exemption, or other clearance

under the Federal Food, Drug and Cosmetic Act (21 U.S.C. 346a et seq.).

(2) If the Administrator disapproves a registration under this paragraph, the Administrator shall provide the registering State with written notification of disapproval, in accordance with paragraph (c) of this section, as soon thereafter as practicable. Such notification will specify the grounds for disapproval and invite the State to comment on the decision.

(3) If requested by the State within ten days of its receipt of a notice of disapproval, the Administrator, or his designee, will consult with appropriate State officials. The Administrator may consider any information presented at such a consultation, or in any other appropriate fashion, in determining whether the disapproval should be rescinded.

(c) *Decision and notification of disapproval.* Except as provided in paragraph (b)(1) of this section, the Administrator will make a final decision on disapproval of a State registration, and provide written notification thereof to the State, within 90 days of the effective date of the registration; provided that, if the State does not notify the Agency of a registration within ten days of its effective date, then the Administrator will make a final decision on disapproval within 90 days of the date on which EPA receives notification of the State registration. The notice of disapproval will specify an appropriate date on which the disapproval will become effective. Disapproval may become effective immediately, or at anytime within the period allowed for the Administrator to make a final decision on disapproval. The notice of disapproval will also, when appropriate, give instructions for use or disposal of the pesticide. Each notice of disapproval will be published in the Federal Register.

(d) *Effect of disapproval.* If a registration issued by a State is disapproved by the Administrator, that registration will not be valid for any purpose under FIFRA, as of the date the disapproval becomes effective. Thereafter, distribution or sale of the pesticide, in either interstate or intrastate commerce, for uses subject to the disapproval will be a violation of sec. 12(a)(1) of FIFRA.

(e) *Rescission of disapproval.* If the Administrator determines, after consultation with the State lead agency, that a registration, previously issued by the State and disapproved by the Administrator, should not have been disapproved under FIFRA, then the Administrator shall rescind the

disapproval. The Administrator shall send written notification of the rescission to the State. In addition, the Administrator shall publish notice of any rescission of disapproval in the Federal Register.

(f) *Notification of registrants.* Any State that issues a registration which has been disapproved, or which is subject to a notice of intent to disapprove, shall be responsible for notifying the affected registrant of any such notice of intent or disapproval, and of any recession of disapproval by the Administrator.

§ 162.155 Suspension of State registration authority.

(a) *General.* (1) If the Administrator finds that a State is not capable of exercising, or has failed to exercise, adequate control over its registration program, so that the State cannot ensure that registrations issued by it will be in accord with the purposes of FIFRA, then the Administrator may suspend the State's authority to register pesticides under sec. 24(c) of the Act. Registrations issued by the State after suspension of its authority will not be considered valid under FIFRA. Registrations issued by the State prior to suspension will not be affected by the suspension.

(2) The Administrator may suspend all or any part of a State's registration authority, as appropriate.

(b) *Grounds for Suspension.* (1) The Administrator may suspend a State's registration authority due to lack of, or failure to exercise, adequate control by the State over its sec. 24(c) registration program. Adequate control includes, but is not limited to, all of the following: (i) Access to appropriate scientific and technical personnel to review data and make determinations as required by § 162.153.

(ii) Registration procedures satisfying § 162.153.

(iii) Complete and accurate records of State registrations.

(iv) Adequate legal authority: (A) To deny, suspend, revoke, or amend a State registration when the registration is not in compliance with FIFRA, this subpart, or State law, or when necessary to prevent unreasonable adverse effects on the environment.

(B) To enter, at reasonable times, by consent, warrant, or other legal means, any establishment where pesticides are produced or held for distribution or sale, to inspect, sample, and observe whether pesticides are being produced or distributed in compliance with FIFRA, this subpart, State law, and the terms of any State registration.

(2) The Administrator may suspend a State's registration authority if the State

fails to exercise the controls specified in paragraph (b)(1) of this section, or if the State refuses to correct within a reasonable time any other significant deficiencies in its regulatory program, as specified by the Administrator in a notice of intent to suspend.

(c) *Procedures for Suspension.* (1) Prior to suspending the registration authority of any State, the Administrator will notify the State lead agency, in writing, of the Administrator's intent to suspend, and of the specific grounds for suspension. The notice of intent will specify whether the suspension will be complete or partial, and will provide the State an opportunity to respond and a reasonable amount of time, not less than 30 days from the date the notice is received, in which to correct the deficiencies specified in the notice. If the State does not correct the specified deficiencies within the reasonable time allowed by the notice, or if the Administrator has not withdrawn the notice of intent before that time, the notice of intent will be published in the Federal Register, and the public given an opportunity to comment thereon.

(2) If requested by the affected State lead agency within 30 days of receipt of the notice of intent to suspend, an informal consultation between appropriate State and EPA officials will be held to discuss the proposed suspension. In such a case, the Administrator shall not make a final decision on the proposed suspension until after the consultation. The Administrator shall consider all relevant information presented at the consultation, or in any other appropriate manner, in determining whether to suspend the State's authority. If the Administrator determines, on the basis of such information, that the deficiencies listed in the notice of intent no longer exist, or will be corrected in a reasonable time, then the Administrator will withdraw, in writing, the notice of intent to suspend.

(3) Within ten days of the date a notice of intent to suspend is published in the Federal Register, a State may request a public hearing to consider the proposed suspension. If a hearing is requested, the Administrator will:

(i) Schedule a public hearing to be held in that State.

(ii) Publish in the Federal Register a notice announcing the date, time, and location of the hearing.

(iii) Appoint a presiding officer who shall preside over the hearing.

(iv) Prescribe additional, appropriate procedures for the conduct of the hearing, including procedures for the presentation of relevant material evidence from the State, EPA, or

members of the public who would be affected by the outcome of the hearing. Evidence may be presented in either oral or written form, at the discretion of the Administrator.

(4) Following the close of any hearing held under paragraph (c)(3) of this section, the presiding officer shall make a recommended decision that the State's authority to register pesticides under sec. 24(c) of FIFRA be suspended, in whole or in part, or that the State's authority not be suspended and that the notice of intent to suspend be withdrawn.

(5) Any recommended decision made by a presiding officer under paragraph (c)(4) of this section may be appealed to the Administrator within 30 days after its issuance by the State or by EPA. Any recommended decision which is not appealed, or which the Administrator does not review on his own initiative, will become a final Agency action 30 days after its issuance.

(6) If no hearing is requested under paragraph (c)(3) of this section, or if a recommended decision is appealed to the Administrator under paragraph (c)(5) of this section, the Administrator shall issue a final order either suspending the State's authority to register pesticides under section 24(c) of FIFRA, in whole or in part, or withdrawing the notice of intent to suspend.

(7) Any final order suspending State registration authority, issued under paragraph (c) (5) or (6) of this section, will specify the grounds therefor and an effective date for the suspension. If the suspension is merely partial, the notice of suspension will specify the types of registrations which will not be recognized as valid under sec. 24(c). All final orders issued under paragraph (c) (5) or (6) will be published in the Federal Register.

(d) *Termination of suspension.* Suspension of a State's authority will be effective for the period specified in the notice of suspension, or if no period was specified, until such time as the Administrator is satisfied that the State can and will exercise adequate control over its program. In the latter case, the Administrator will notify the State that the suspension is terminated, or that it will be terminated on a specific date. In either case, the Administrator will publish a notice of the termination of suspension in the Federal Register.

(e) *Judicial review.* Any State whose authority to register pesticides has been finally suspended by the Administrator may seek judicial review of the Administrator's decision under sec. 16 of FIFRA, at any time prior to termination of the suspension. Such suspension shall remain in effect during the period of

judicial review unless otherwise ordered by the Administrator.

§ 162.156 General requirements.

(a) *Requirements for distribution and use.* (1) Any product whose State registration has been issued in accordance with §§ 162.152 and 162.153 may be distributed and used in that State, subject to the following provisions of the Act and the regulations promulgated thereunder:

(i) Sec. 12(a)(1) (A) through (E), in accordance with:

(A) Sec. 2(q)(1) (A) through (G).

(B) Sec. 2(q)(2) (A) through (D).

(ii) Sec. 12(a)(2) (A) through (G) and (I) through (P).

(2) A product or use classified by a State for restricted use under § 162.153(g) may be used only by, or under the direct supervision of, an applicator certified under a plan approved by EPA in accordance with sec. 4 of FIFRA.

(3) State registrations which are not issued in accordance with § 162.152 (a) and (b)(2) (i), (ii) and (iii) are not authorized by section 24(c) and are not considered valid for any purposes under FIFRA. When the Administrator determines that a registration is invalid, the Administrator shall notify the registering State that the registration is invalid, and may specify the reason for the invalidity.

(b) *Establishment registration requirements.* No person may produce any pesticide, including any pesticide registered by a State under section 24(c), unless the establishment in which it is produced is registered by the Administrator in accordance with sec. 7 of FIFRA and 40 CFR Part 167.

(c) *Books and records requirements.* All producers of pesticides, including those producers of pesticides registered by States under sec. 24(c), must maintain records in accordance with the requirements imposed under sec. 8 of FIFRA and 40 CFR Part 169.

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